Run on:

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Glucagon like pept Glucagon-like pept GLP-1(7-37) peptid Human glucagon-like pept Glucagon-like pept
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            insulinotropic; glucagon like peptide; GLP-1; diabetes mellitus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New peptide derivs. - increase insulin prodn. from beta islet cells, comprise fragment of glucagon like peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Insulinotropic peptide comprising GLP-1 residues 7-37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Insulinotropic pep
Glucagon-like pept
Glucagon-like pept
Glucagon-like pept
Glucagon-like pept
Insulinotropin dar
Insulinotropin (GL
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                                                                                                                          October 15, 2003, 10:33:21; Search time 61.4918 Seconds (without alignments) 80.019 Million cell updates/sec
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| SiDS1/gcgdata/geneseq/geneseqp-embl/AA1980.DAT:*
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                                                                                                                                                                                                                                                                                                                                                                            1107863
              GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                      US-09-719-410-3
161
1 HABGIFTSDVSSYLBGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                      1107863 seqs, 158726573 residues
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Maximum Match 100%
Listing first 45 summaries
                                                                                        OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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(Updated on 25-MAR-2003 to correct PA field.)
                         Sequence 31 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The peptide has insulinotropic activity specifically for pancreatic beta cells. The peptide is derived from glucagon which, after synthesis is cleaved into three peptides: glucagon which, after synthesis is cleaved into three peptides: glucagon, glucagon-like peptide i (dib-1) and GLP-2. GLP-1 has 37 AAs in its unprocessed form and is unable to mediate the induction of insulin biosynthesis. It is, however, natably converted to a 31 AA-long peptide having AAS 7-37 of GLP-1. Preferred derivs, have an H2 gp at the ABS 7-37 of GLP-1. Preferred derivs, have an H2 gp at the cation or lower alkyl gp, and R' and R' = H or terminal where M a cation or lower alkyl gp, and R' and R' = H or a lower alkyl gp. The peptide or derivs are useful in the study of the pethogenesis of maturity onset of diabetes wellitus and also in therapy.
                                                                                                                                                                                                                                              Gaps
                                    The marmalian hormone glucagon is produced as a precursor which is subsequently cleaved to yield three peptides, one of which is GLP-1 GLP-1 is itself processed in the pancreas and intestine from a 37 amino acid long peptide to 31 residue peptide (7-37) having the sequence given here. This insulindroptor hormone appears to act specifically on pancreatic Beta cells and as such is useful for enhancing insulin expression, eg for the treatment of diabetes mellitus. (Updated on 03-0CT-2002 to add missing OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Insulin; diabetes mellitus; insulinotropic: pancreatic beta cells.
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                                                                                                                                                                                                                 Query Match 100.0%; Score 161, DB 8; Length 31, Best Local Similarity 100.0%; Pred. No. 2.2e-16; Matches 31; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                        1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                      1 HAEGIFISDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Glucagon-like peptide, GLP-1 (7-37).
                                                                                                                                                                                                                                                                                                                                                                 AAR07397 standard; peptide; 31 AA.
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            Claim 1; Page 24; 35pp; English.
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(first entry)
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                                                                                                                                                                                         Sequence 31 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-FEB-1989;
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29-JAN-1991
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The last three amino acids may sequentially be omitted.
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                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 31;
  Length 31;
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                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /label= D-H, N-acetyl-H, N-isopropyl-H
                                                                                                                                                                                                                                                                                                                                                                                                        Glucagon; insulin; diabetes; degradation; islet cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 161; DB 12; Best Local Similarity 100.0%; Pred. No. 2.2e-16; Matches 31; Conservative 0; Mismatches 0;
Query Match 100.0%; Score 161; DB 11;
Best Local Similarity 100.0%; Pred. No. 2.28-16;
Best Local Similarity 100.0%; Mismatches 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Buckley DI, Habener JF, Mallory JB, Mojsov S;
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                                                                               Glucagon-like peptide-1 (H)7-GLP-1(7-37)
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AAR13422
ID PAR13422 standard; Protein; 31 AA.
XX
AC PAR13422;
                                                                                                                                                                                                                                     AAR13420 standard; Protein; 31 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 7; Page 37; 50pp; English.
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                                                                                                                                                                                                                                                                                                                    29-OCT-1991 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1991-252609/34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 31 AA;
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Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
Location/Qualifiers
Misc-difference 31
/note= "Gly31 may be omitted, in which case the C-terminal is amidated"
                                                                                                                       New glucagon-like peptide-1 (GLP-1) analogues - have increased insulin-stimulating activity and/or resistance to degradation invo
                                                                                                                                                                                                                                                                                                                                                                                 0;
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                                                                                                                                                                                                                                                                                                                                                  Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glucagon-like peptide, GLP, phospholipid,
dioctanoyl-L-alpha-phosphatidylcholine, diabetes,
dilauroyl-L-alpha-phosphatidylcholine, insulinotropic agent.
                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 161; DB 12; Best Local Similarity 100.0%; Pred. No. 2.2e-16; Matches 31; Conservative 0; Mismatches 0;
                                                                Buckley DI, Habener JF, Mallory JB, Mojsov S;
                                                                                                                                                                                                                                                                                                                                                                                                                             1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                               1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Glucagon-like peptide (GLP-1(7-37)).
                                                                                                                                                                                        Claim 7; Page 37; 50pp; English
   24-JAN-1990; 90US-0468736
                                    (BUCK/) BUCKLEY D I.
                                                                                             WPI; 1991-252609/34.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                        New glucagon-like peptide-1 (GLP-1) analogues - have increased insulin-stimulating activity and/or resistance to degradation in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 161; DB 12; Length 31; Best Local Similarity 100.0%; Pred. No. 2.2e-16; Matches 31; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glucagon; insulin; diabetes; degradation; islet cells.
                                                              Glucagon; insulin; diabetes; degradation; islet cells.
                                                                                                                                                                                                                                                                                                                                             Buckley DI, Habener JF, Mallory JB, Mojsov
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                                                                                                                             Location/Qualifiers
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                                                                                                                                                        /label= D-Ala
                                                                                                                                                                                                                                                      91WO-US00500.
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29-OCT-1991 (first entry)
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Modified-site
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                                                                                             Synthetic.
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24-JAN-1991; 91WO-US00500

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insulinotropic activity; GLP-1; glucagon-like protein 1; NIDDM; non-insulin dependent diabetes mellitus; insulintropin.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Danley DE, Gelfand RA, Geoghegan KF, Kim Y, Lambert WJ;
Qi H, Oih, Hong Q, Yesook K;
                                                                                                                                                                                                                                                     Insulinotropin (GLP-1(7-37)) for use in treating NIDDM.
                              RESULT 8
ARNS3346
LD ARNS3246 standard; peptide; 31 AA.
XX
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                                                                                                                                                                              25-MAR-2003
02-MAY-1995
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                                                                                                                              AAR63246;
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A medicament for intranasal admin. comprises this glucagon-like peptide (GLP) and a phospholipid, e.g. dioctanoyl-L-alpha-phosphatidy-lochine, dilauroyl-L-alpha-phosphatidy-lochine, etc. The medicament is used as an insulinotropic agent in the treatment of diabetes. It has a very favourable absorption profile: absorption is slightly protracted and a constant plasma concn. of GLP is provided over an extended period. In adm. the phospholipid exerts a stabilising effect on the peptide. (Updated on 25-WAR-2003 to correct PN field.)
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                                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Insulinotropic; activity; enhancing insulin activity; treatment; Type II diabetes.
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                                                                                                                                                                                                                                                                                                                                                                                                          1 HAEGTFISDVSSYLEGQAAKEFIAWLVKGRG 31
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(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-MAR-2003
27-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-DEC-1993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR45434;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
ARR45434
XX ARR45434
XX ARR45434
DT 25-M
XX DD 27-J
XXX DD 23-D
XXX C DD 23-D
XXX DD 23-D
XX DD 23-D
XXX DD 23-D
XX DD 23
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93US-0044133.

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(updated)
(first entry)

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This peptide is GLP-1(7-37) [GLP = glucagon-like peptide]. GLP-1 and its deriv.s are useful in the treatment of Non-Insulin Dependent Diabetes Mellitus (MIDM). During processing in the pancreas and intestine, GLP-1 (AAR61245) is converted to a 31 amino acid peptide having amino acids 7-37 of GLP-1, alternatively referred to as insulinotropin. GLP-1(7-37) has insulinotropic activity, let. it is able to stimulate, or cause to be stimulated, the synthesis of the hormone insulin. Other derivs, are shown in AAR63247-51. It has been discovered that prolonged plasma elevations of GLP-1, and related polypeptides, are necessary during the meal and beyond to achieve sustained glycemic control in patients with NIDDM. The invention provides a compson. that has prolonged action after each administration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%; Score 161; DB 15; Best Local Similarity 160.0%; Pred. No. 2.2e-16; Matches 31; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 HAEGIFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 9
AAR75685
XX
AC AAR75885;
XX
C AAR75885;
XX
Claim 2; Page 46; 70pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 31 AA;
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Gaps

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1 HAEGTFTSDVSSYLEGQAAKEFIAMLVKGRG 31

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us-09-719-410-3.rag

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The naturally occurring sequence of Glucagon Like Peptide 1 (GLPL) is AAMS9072. It is a 36 AA peptide that has been recombinantly produced but without a mechanism for providing for the amidation of the C-terminal Arg residue. Amidated recombinant GLPL (7-36)MBZ (AAMS9063) was prepd. from a multicopy fusion protein conty. four copies of a modified truncated GLP peptide having AA residues A-F-A at residues 37-3 (GPL) (7-34)-A-F-A) (AAMS9064). The recombinant GLPL (7-34)-A-F-A) (AAMS9064). The recombinant call the Live ALA can be transpeptidated to yield the modified recombinant native GLPL (7-35)-NH2 (AAMS9063) as follows. Trypsin was used to clare the peptide at the Lys-Ala bond in the presence of either GLY-Arg-GLY addition units so that the cleavage of the ALA-Phe-Arg leaving unit is followed by the addition of GLP-Arg or GLP-Arg-GLY the core GLPL (7-34) to yield either amidated 7-36 GLP-HRZ or GLP-HRZ or GLP-HRZ OF GLP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
                                                                                                                                                  Transpeptidation of recombinant polypeptides - using endopeptidase such as trypsin or thrombin to modify C-terminal residue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 161; DB 16; Length 31; Best Local Similarity 100.0%; Pred. No. 2.2e-16; Matches 31; Conservative 0; Mismatches 0; Indels (
                                                      Henriksen D, Manning S, Partridge B, Stout J, Wagner FW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; glucagon like peptide; GLP-1; analogue; stimulation; pancreas; insulin; islet cell; treatment; type II diabetes; degradation; resistant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glucagon like peptide 1 (7-37) analogue D-His7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "D-form residue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
1
                                                                                                                                                                                                                                                               Claim 34; Page 13; 69pp; English
  (BION-) BIONEBRASKA INC.
                                                                                                       WPI; 1995-075233/10.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR75885 is the glucagon like peptide-1 (GLP-1) amino acids 7-36, the featured derivs. GLP-1(7-36)amide and GLP-1(7-37) are also given in the claims. The peptide and its derivs. can be used for the treatment of type 2 diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Prodn. of glucagon-like peptide-1 (7-36) - using transformed bacteria contg. 2 or more consecutive DNA sequences coding for GLP-1 (7-36)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels 0;
                                                                                                                                                                                                      ... /note= "may be amidated when Gly 31 is absent" Misc-difference 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 161; DE 16; Length 31; Best Local Similarity 100.0%; Pred. No. 2.2e-16; Matches 31; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glucagon Like Peptide: GLP; transpeptidation; endopeptidase; trypsin; thrombin; cleavage.
                                     Glucagon like peptide-1; GLP-1; (7-36); (7-36)amide; (7-37); type 2 diabetes; treatment.
Glucagon like peptide-1(7-36), (7-36)amide and (7-37).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glucagon like peptide 1 (GLP1) (7-36)-Gly.
                                                                                                                                                                                                                                                                                    /note= "may be absent"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bjorn SE, Rasmussen JS, Thim L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 1; 27pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  94WO-DK00487.
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                                                                                                                                                                                     Key
Modified-site
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                                                                                                                                 Synthetic.
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us-09-719-410-3.rag

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New modified glucagon-like peptide I fragments - have higher activity than glucagon or have improved plasma stability, useful for treating type II diabetes
                                                                                    Buckley DI, Habener JF, Mallory JB, Mojsov S;
   (MALL/) MALLORY J B. (MOJS/) MOJSOV S.
                                                                                                                                              WPI; 1996-383697/38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 31 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                      New modified glucagon-like peptide I fragments - have higher activity than glucagon or have improved plasma stability, useful for treating type II diabetes
                                                                                                                                                                                                                                                                                                                                                                     The present peptide is a human glucagon like peptide I (GIP-1) analogue, which is useful for stimulating insulin release from pancreatic slate cells, especially in the treatment of type II diabetes at doses of I pg/kg to I mg/kg. This peptide has better resistance to degradation in plasma than GIP-1(7-37), and has a higher activity than glucagon, as exemplified by the results of an adenylate cyclase assay where the peptide had an ED50 of I.1 nm, compared to 0.16 nm for GIP-1(7-37) and 80 nm for glucagon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Misc-difference zs
Misc-difference 29

Anote= "Optionally absent when Arg30 and Gly31 are
absent"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 161; DB 17; Length 31; Best Local Similarity 100.0%; Pred. No. 2.2e-16; Matches 31; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, glucagon like peptide, GLP-1; analogue, stimulation, pancreas; insulin; islet cell; treatment; type II diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glucagon like peptide 1 (7-37) analogue D-Lys34.
                                                                                          Mojsov S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 HAEGTFTSDVSSYLEGGAAKEFIAMLVKGRG 31
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                                                                                    Buckley DI, Habener JF, Mallory JB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key Location/Qualifiers
Misc-difference 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW03907 standard; peptide; 31 AA.
                                                                                                                                                                                                                                                                                                                       Claim 14; page -; 16pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9105-0762768.
9005-0468735.
9305-0165516.
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(first entry)
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(MALL/) MALLORY J B. (MOJS/) MOJSOV S.
                                                                                                                                              WPI; 1996-383697/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 31 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-DEC-1993;
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24-JAN-1990;
10-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-MAR-2003
15-APR-1997
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AAW03907
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                                                               The present peptide is a specific example of a claimed human glucagon like peptide 1 (GLP-1) analogue, which is useful for stimulating insulin release from pancreatic islet cells, especially in the treatment of type II diabetes at doses of 1 pg/Rg to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note- "optionally absent when Arg30 and Gly31 are absent"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "optionally absent when Gly31 is absent"
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                                                                                                                                                                                                                                                                                                                                                                                                                        Length 31;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 161; DB 17; Best Local Similarity 100.0%; Pred. No. 2.2e-16; Matches 31; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Glucagon like peptide 1 (7-37) analogue D-Arg36.
                                                                                                                                                                                                                         1 mg/kg. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 HAEGTFISDVSSYLEGGAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "optionally absent"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "D-form residue" Misc-difference \frac{1}{2}9
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AAW03929

ID AAW03929;

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XX

AAW03929;

DT 15-ARA-2003 (updated)

DT 15-ARA-2003 (inst entry)

XX

Human; glucagon like peptide; GLP-1;

XW

Human; glucagon like peptide; GLP-1;

XW

Homo sapiens.

ISC-difference 30

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Misc-difference 31

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Misc-difference 31

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Example 1; page -; 16pp; English.
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Gaps

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New modified glucagon-like peptide I fragments - have higher activity than glucagon or have improved plasma stability, useful for treating type II diabetes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.0%; Score 161; DB 17; Length 31; Best Local Similarity 100.0%; Pred. No. 2.2e-16; Matches 31; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 HAEGIFTSDYSSYLEGGAAKEFIAMLYKGRG 31
                                                                                                                                                                 Example 1; page -; 16pp; English.
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15-APR-1997 (first entry)
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(HABE/) HABENER J F.
(MAIL/) MALLORY J B.
(MOJS/) MOJSOV S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1996-383697/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 31 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key
Modified-site
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24-JAM-1990;
10-DEC-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW03865;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                         New modified glucagon-like peptide I fragments - have higher activity than glucagon or have improved plasma stability, useful for treating type II diabetes
                                                                                                                                                                                                                                                                                                                           The present peptide is a specific example of a claimed human glucagon like peptide I (GLP-1) analogue, which is useful for stimulating insulin release from pancreatic islet cells, especially in the treatment of type II diabetes at doses of 1 pg/kg to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ____notionally absent when Arg30 and Gly31 are absent"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 161; DB 17; Length 31; Best Local Similarity 100.0%; Pred. No. 2.2e-16; Matches 31; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; glucagon like peptide; GLP-1; analogue; stimulation; pancreas; insulin; islet cell; treatment; type II diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mallory JB, Mojsov S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glucagon like peptide 1 (7-37) analogue D-Lys26.
Moj sov
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 mg/kg.
(Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            __ote= "optionally absent"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "D-form residue"
Misc-difference 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
AAW03899 Standard; peptide; 31 AA.
XX
AAW03899 Standard; peptide; 31 AA.
XX
DT 25-MAR-2003 (updated)
DT 15-APR-1997 (first entry)
XX
Human; glucagon like peptide; GLP-1; i
XW
KW
Human; glucagon like peptide; GLP-1; i
XW
KW
Homo sapiens.
XX
Horc-difference 29
FT
Misc-difference 30
FT
Misc-difference 30
FT
Misc-difference 30
FT
Misc-difference 31
FT
Misc-difference 3
Mallory JB,
                                                                                                                                                                                                                                                              Example 1; page -; 16pp; English.
Buckley DI, Habener JF,
                                                            WPI; 1996-383697/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 31 AA;
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New modified glucagon-like peptide I fragments - have higher activity than glucagon or have improved plasma stability, useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "optionally absent when Arg30 and Gly31 are absent"
                                                                                                                                                                                                                                                                                                                                      Glucagon like peptide 1 (7-37) analogue N-formyl-(D-His/L-His7).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, glucagon like peptide, GLP-1; analogue, stimulation, pancreas; insulin; islet cell; treatment; type II diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "N-formyl-(D/L)-histidine" Misc-difference 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Buckley DI, Habener JF, Mallory JB, Mojsov S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "optionally absent"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                         AAW03865 standard; peptide; 31 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       910S-0762768.
900S-0468736.
930S-0165516.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9305-0165516.
RESCULT 15

AAM03865

AA

XX

XX

AAM03865

DJ 25-MA5

DJ 25-MA5
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treating type II diabetes

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Query Match
Best Local Similarity 100.0%; Pred. No. 2.2e-16;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                       The present peptide is a specific example of a claimed human glucagon like peptide 1 (GLP-1) analogue, which is useful for stimulating insulin release from pancreatic islet cells, especially in the treatment of type II diabetes at doses of 1 pg/kg to 1 mg/kg.

(Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                              Example 1; page -; 16pp; English.
                                                                                                                                                                   Sequence 31 AA;
8 X C C C C C C X X X Z Z
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Db
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.; 0

Search completed: October 15, 2003, 10:53:05 Job time : 63.4918 secs

Sequence 5 Sequence 5 Sequence 5 Sequence 7 Sequence 1 Sequence 1 Sequence 2 Sequence 2 Sequence 2 Sequence 2 Sequence 3 Sequence 3 Sequence 3 Sequence 3 Sequence 3 Sequence 3 Sequence 5 Sequence 5

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US-09-108-661-18

US-08-784-582-56

US-08-784-582-51

US-08-784-582-13

US-08-784-582-13

US-08-835-112

US-09-258-750-1

US-09-258-750-3

US-09-258-750-3

US-09-258-750-3

US-09-258-7111-1

US-09-398-111-1

US-09-398-111-3

US-09-398-111-3

US-09-398-111-3

US-09-398-111-3

US-09-398-111-3

US-09-398-111-3

US-09-398-111-3

US-09-398-111-3
800H88888884444
800H8845678800H8845
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Sequence 3, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 2, Appli
Sequence 1, Appli
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                                                                                                           October 15, 2003, 10:51:07; Search time 20.3279 Seconds (without alignments) 64.524 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Issued_Patents_Aa:*

. /cgn2_6/ptodata/l/iaa/5a_COMB.pep:*

. /cgn2_6/ptodata/l/iaa/5B_COMB.pep:*

. /cgn2_6/ptodata/l/iaa/6a_COMB.pep:*

. /cgn2_6/ptodata/l/iaa/8a_COMB.pep:*

. /cgn2_6/ptodata/l/iaa/Ba_COMB.pep:*

. /cgn2_6/ptodata/l/iaa/Packfiles1.pep:*

. /cgn2_6/ptodata/l/iaa/Packfiles1.pep:*
              GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd
                                                                                                                                                                     US-09-719-410-3
161
1 HARGTFTSDVSSYLBGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                        328717 seqs, 42310858 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                              OM protein - protein search, using sw model
                                                                                                                                                                                                                                         BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                        Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                              Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database :
                                                                                                                                                                                                                                                                                           Searched:
                                                                                                                Run on:
```

```
GENERAL INCORMENTATION
GENERAL INCORMENTATION
APPLICANT: Stout, Jay
APPLICANT: Stout, Jay
APPLICANT: Geniksen, Dennis
APPLICANT: Henriksen, Dennis
APPLICANT: Henriksen, Dennis
APPLICANT: Harriksen, Dennis
APPLICANT: Manning, Shane
TITLE OF INVENTION: Enzymatic Method for Modification of
TITLE OF INVENTION: Enzymatic Modification of
TITLE OF INVENTION: S512459west Center
CITY: Minneapolis
STATE: Minneapolis
STATE: Minneapolis
COMPUTER: READABLE FORM:
MINNEATING TYPE: Floppy disk
COMPUTER: TEM PC compatible
COMPUTER: SYSTER: 20-JUL-1993
CLASSIFICATION NUMBER: 08/08/095,162
FILING DARIE: 20-JUL-1993
CLASSIFICATION NUMBER: 28,659
REFERENCE/DOTEN NUMBER: 28,659
REPERENCE/DOTEN NUMBER: 28,659
REPERENCE/DOTEN NUMBER: 28,659
REPERENCE/DOTEN NUMBER: 28,659
REPERENCE/DOTEN NUMBER: 28,659
REPUBLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 151; DB 1; Length 31; Best Local Similarity 100.0%; Pred. No. 9.9e-17; Matches 31; Conservative 0; Mismatches 0; Indels
Application US/08095162
5512459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

| MONEDIA SOURCE:

| MONEDIA SOURCE:

| CLONE: GLPI (7-36)-Gly

US-08-095-162-3
```

us-09-719-410-3.rai

```
TITLE OF INVENTION: Enzymatic Method for Modification of
TITLE OF INVENTION: Recombinant Polypeptides
NUMBER OF SEQUENCES:
CORRESPONDENCES:
ADDRESSEE: Merchant & Gould
STREET: 3100 No. 6037143west Center
CITY: Mineapolis
STREE: MN
COUNTRY: MS
COUNTRY: BS 2000
COMPUTE: BADABLE FORM:
MEDIUM TYBE: Floppy disk
COMPUTE: BADABLE FORM:
MEDIUM TYBE: Floppy disk
COMPUTE: BADABLE FORM:
MEDIUM TYBE: PLOPPY disk
COMPUTE: BATENIA SYSTER: PC-DSS/MS-DS
SOFTWARE: PATENIA NOMBER: US/08/967,374
SPILING DATE:
CLASSITICATION DATA:
APPLICATION NUMBER: US/08/967,374
FILING DATE: 29-MG-1995
ATTORNEY APPLICATION DATA:
REGISTRATION NUMBER: 8648.32-USDI
FILING DATE: CANTER: 8648.32-USDI
TELEPHONE: G12-33-500
TELEPHONE: MINO acids
TYPE: AMINO acids
TYPE: AMINO acids
TYPE: AMINO acids
TOPOLOGY: linear
MOLECULE TYPE: Peptide
TOPOLOGY: linear
TUREDHATE SOURCE:
CLONE: G1PI (7-36)-G1Y
US-08-967-374-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 4
US-08-961-405A-1
                                                                                                                                                                                                                                                                                                                                        Patent No. 5707820:

GENERAL INFORMATION:
APPLICANT: Stout, Jay
APPLICANT: Stout, Jay
APPLICANT: Stout, Jay
APPLICANT: Barriage, Bruce
APPLICANT: Manning Shane
ITITA OF INVENTION: Recombinant Polypeptides
APPLICANT: BADRESS: 26
CORRESSOUNENCE ADDRESS: 3
COURRESSOUNENCE ADDRESS:
ADDRESSED: Merchant & Gould
STREET: 3100 No. 5707826west Center
CITY: Minnapolis
STREET: 3100 No. 5707826west Center
CITY: Minnapolis
STREET: BAD COMPRES: 100 No. 5707826west Center
CONFOURT: USA
ZUP: 5540 NO. 5707826west Center
COMPUTER: 100 NO. 57087470.
APPLICATION NUMBER: 08 08/095,162
FELENGE APPLICANT INFORMATION:
APPLICATION NUMBER: 28 0559
REFERENCE/DOCKET NUMBER: 28 05078
TELEPRON: 612-332-500
TELEPRON:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 161; DB 1; Length 31; Best Local Similarity 100.0%; Pred. No. 9.9e-17; Matches 31; Conservative 0; Mismatches 0; Indels
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                                                                                                                  | HARGTFISDVSSYLEGQAAKEFIAWLVKGRG 31
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US-08-967-374-3
US-08-967-374
; Sequence 3, Application US/08967374
; Patent No. 6037143
; GENERAL INFORMATION:
; APPLICANT: Manner, Fred W.
; APPLICANT: Stout, Jay
APPLICANT: Benriksen, Dennis
; APPLICANT: Parriksen, Dennis
; APPLICANT: Parriksen, Dennis
                                                                                                                                                                                                                                                                                      ; Sequence 3, Application US/08470220A; Patent No. 5707826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: S
APPLICANT: B
APPLICANT: F
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Query Match 100.0%; Score 161; DB 3; Length 31; Best Local Similarity 100.0%; Pred. No. 9.9e-17; Matches 31; Conservative 0; Mismatches 0; Indels
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us-09-719-410-3.rai

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US-09-302-56-3
US-09-302-56-3
US-09-302-56-3
US-09-302-56-3
US-09-302-56-3
US-09-302-56-3
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US-09-302-56-3
US-09-20-56-3
US-08-20-20-30-3
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US-08-20-3
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US-08-20-3
US-08-20-3
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US-08-20-3
US-08-3
US-08-3
US-09-302-596-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 7
US-08-472-349-2
1 Sequence 2, Application US/08472349
2 Sequence 2, Application US/08472349
2 Sequence 2, Application US/08472349
3 Patent No. 628472
3 GENERAL INFORMATION:
3 APPLICANT: Galfand, Robert A. APPLICANT: Gelfand, Robert A. APPLICANT: APPLICANT: APPLICANT: APPLICANT: New York COUNTRY: U S.A. STREET: 235 East 42nd Street, 20th Floor STREET: New York COUNTRY: U S.A. 21F: 10017-5755 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER READABLE FORM: RELEASE #1.0, Version #1.25 CURRENT APPLICATION DATA: US/08/181,655 FTLING DATE: US/08/181,655 FTLING DATE:
                          1 HABGTFTSDVSSYLBQQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 HAEGTFISDVSSYLEGGAAKEFIAWLVKGRG 31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Sheyka, Robert F.
RESISCHAUION NUMBER: 31,304
REFERBNCE/DOCKET NUMBER: PC8391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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                                                                                                                                                                                                                                                                                                                                                     Ouery Match 100.0%; Score 161; DB 3; Length 31; Best Local Similarity 100.0%; Pred. No. 9.9e-17; Matches 31; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DRTA:
APPLICATION NUBBER: US 60/030,213
FILING DATE: 05-00v-1996
ATIGNET/AGBM INFON-1996
ATIGNET/AGBM INFON-1996
ATIGNET/AGBM INFON-1996
REGISTRATION NUMBER: 35.01
REFERENCE/DOCKET NUMBER: 3051/90264
TELEPAN: 312-759-5646
INFORMATION PREVENTION:
TELEPAN: 312-759-5646
INFORMATION POR SEQ ID NO: 1: 580/URNCE CHARACTERISTICS:
LENGRYH: 31 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: Amino acids
                                                                                                                                                                                                                                                                              ; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-961-405A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ) TOPOLOGY: linear; MOLECULE TYPE: peptide US-08-915-918A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 5
US-08-915-918A-1
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| APPLICANT: WISHOLLY.
| APPLICANT: Wisholl, Than
| APPLICANT: Wisholl, Than
| TITLE OF INVENTION: The Diagnostic Test to Determine Beta-Cell
| TITLE OF INVENTION: TYPE-II Diabetes
| TITLE OF INVENTION: TYPE-II Diabetes
| TITLE DE INVENTION: TYPE-II Diabetes
| TITLE REPRENCE: P01987UG0
| CURRENT APPLICATION NUMBER: US/09/33,415
| CURRENT PILINO BARE: 1999-06-15
| WINDER OF SEQ ID NOS: 13
| SEQ ID NO 3
| LENGTH: 31
| LENGTH: 31
| TITLE: PRT
| CREATER: P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cuery Match 100.0%; Score 161; DB 4; Length 31; Best Local Similarity 100.0%; Pred. No. 9.9e-17. Matches 31; Conservative 0; Mismatches 0; Indels
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Best Local Similarity 100.0%; Pred. No. 9.9e-17;
Matches 31; Conservative 0; Mismatches 0; Indels
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US-09-799D-1
Squence 1, Application US/09209799D
Factor No. 6380357
Factor No. 6380357
GENERAL INFORMATION:
APPLICANT: Horfman, James
APPLICANT: Horfman, James
APPLICANT: Horfman, James
APPLICANT: Horfman, Charavarthy
TITLE OF INVENTON: GLCAGON-LIKE PEPFIDE-1 CRYSTALS
FILE REFERENCE: X-10242
CURRENT APPLICATION WOMBER: US/09/209,799D
CURRENT APPLICATION WOMBER: US/09/209,799D
CURRENT FILING DAIE: 1998-12-11
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin version 3.0
SEQ ID NO 1
LENGTH: 31
TYPE: PRT
ORGANISM: Homo sapiens
US-09-209-799D-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 HABGTFTSDVSSYLBGQAAKEFIAMLVKGRG 31
                                                                          RESULT 11
US-09-505-991-3
Sequence 3, Application US/09505991
; Patent No. 6403861
; GENERAL INFORMATION:
; APPLICANT: Wagner, Fred W.
; Stout, Jay
Henriksen, Dennis
                                                                                                                                                                                                                                                                                                                   RESULT 9
15-109-333-415-3
Sequence 3, Application US/09333415
Patent No. 6344180
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 161; DB 4; Length 31;
Best Local Similarity 100.0%; Pred. No. 9.9e-17;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ) OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: Peptide
US-09-623-618B-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 161; DB 3; Length 31; Best Local Similarity 100.0%; Pred. No. 9.9e-17; Matches 31; Conservative 0; Mismatches 0; Indels
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104-09-623-6188-2
| Sequence 2, Application US/09623618B
| Patent No. 632936
| GENERAL INFORMATION
| APPLICANT: Bridon, Dominique P. APPLICANT: Bridon, Dominique P. APPLICANT: Bridon, Dominique P. APPLICANT: Extidon, Dominique P. APPLICANT: Extidon, Alan M. APPLICANT: Explance, Borsten I. APPLICANT: Explance, Borsten I. APPLICANT: Explance, Anouk APPLICANT: St. Patere, Seege ITTLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES ITLE REPERRNCE: 500862001620
| CURRENT FILING DATE: 2000-09-05 |
| PRIOR PILICATION NUMBER: PCT/US00/13563 |
| PRIOR PILING DATE: 1999-05-17 |
| PRIOR PILING DATE: 1999-05-17 |
| NUMBER OF SEQ ID NOS: 35 |
| SOFFWARE: FastESQ for Windows Version 4.0 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPRONE: (212)573-1189
TELEPRONE: (212)573-1189
TELERAX: (212)573-1939
INFORMATION FOR SEG ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 31 anino acids
TYPE: ani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN: N/A
STRAIN: N/A
INDIVIDED: N/A
HAPLOTYPE: N/A
TARDIATE SOURCE:
LIBRARY: N/A
POSITION IN GENOME:
CHROMOSOME/SEARMY: N/A
HAPP POSITION: N/A
UNITS: N/A
US-08-472-349-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT ORGANISM: Artificial Sequence
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RESULT 13
US-09-657-332A-2
Sequence 2, Application US/09657332A
Sequence 2, Application US/09657332A
Sequence 2, Application US/09657332A
Sequence 2, Application
Sequence 2, Application
Sequence 3, Application
APPLICANT: L'Archeveque, Benoit
APPLICANT: Ezrin, Alan M.
APPLICANT: Erblanc, Darren L.
APPLICANT: St. Piderre, Serge
TITLE REPERRENCE: 500862001500
FILE REPERRENCE: 500862001500
CURRENT APPLICATION NUMBER: 05/09/657,332A
CURRENT PILING DATE: 1999-10-10
PRIOR FILING DATE: 1999-10-17
PRIOR FILING DATE: 1999-05-17
NUMBER: 0F SEQ ID NOS: 35
SEQ ID NO 2
LENGTH: 31
TURE CONTAINED
SEQ ID NO 2
LENGTH: 31
TURE CONTAINED
SEQ ID NO 2
LENGTH: 31
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ORGANISM: Artificial Sequence
PRATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-657-332A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FESSULF 14
US-09-614-847-124
Sequence 124, Application US/09614847
Sequence 124, Application US/09614847
Febrain Wo. 6528486
Septent Wo. 6528486
Septent Wo. 74 Particular Septent Wo. 74 Papticant Introduction:
APPLICANT: LARRELEN. Biarne Due
APPLICANT: Mikkelsen, Jens Mollgaard
APPLICANT: Novel Soren
FILLE REPERENCE: 55514(4548)
FILLE REPERENCE: 55514(4548)
CURRENT PRILING DATE: 2000-07-12
FRICH PALCATION NUMBER: US 60/143,591
FRICH FILLING DATE: 1999-07-13
NUMBER OF SEQ ID NOS: 153
SEQ ID NO 124
FRICH PARTICALION OF 121
SEQ ID NO 124
FRICH PARTICALION OF 121
FRICH PARTICAL OF 121
FRICH PART
                                                                                                    Query Match 100.0%; Score 161; DB 4; Length 31; Best Local Similarity 100.0%; Pred. No. 9.9e-17; Matches 31; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                             1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                    1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORCANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: GLP-1(7-37)
UG-09-614-847-124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VESULT 12
US-09-303-016-3
Sequence 3, Application US/09303016
Factor No. 642917
Sequence 3, Application US/09303016
Factor No. 642917
Sequence 3, Application US/09303016
Factor No. 642917
STERRAL INTERNATION:
TILLE OF INVENTION: Matabolic Intervention with GLP-1 or its Biologically TILLE OF INVENTION: Active Analogues to Improve the Function of the TILLE OF INVENTION: Active Analogues to Improve the Function of the TILLE OF INVENTION: Active Analogues to Improve the Function of the CURRENT APPLICATION NUMBER: US/09/303,016
CURRENT APPLICATION NUMBER: 60/103,498
FRIOR FILING DATE: 1999-04-36
SPION FILING DATE: 1999-10-08
NUMBER OF SEQ ID NOS: 13
SOFTHARE: Patentin Ver. 2.0
SEQ ID NO 3
LENGIH: 31
STREE: PROFILE OF SEQ ID NOS: 13
SEQ ID NO 3
SERVET SEQ ID NOS: 13
SEQ ID NO 3
SERVET SEQ ID NOS: 13
SEQ ID NO 3
SERVET SEQ ID NOS: 13
SEQ ID NO 3
SERVET SEQ ID NOS: 13
SEQ ID NO 3
SERVET SEQ ID NOS: 13
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTE: MA

COMPUTE: 15402

COMPUTE: 55402

COMPUTE: F10ppy disk

CONDUTE: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFWARR: PatantIn Release #1.0, Version #1.30

CURSTY APPLICATION DATA:

APPLICATION NUMBER: US/09/505,991

FILING DATE: -TNFED-2000

CLASSITCATION NUMBER: 08/520,485

FILING DATE: -CNKNOWN>

FILING APPLICATION NUMBER: 08/520,485

FILING DATE: -CNKNOWN>

REGISTRATION NUMBER: 6649.32-USDI

TELEPHONE: 612-332-901

TELEPHONE: 612-332-901

TELEPHONE: 612-332-901

TELEPHONE: 612-332-901

TELEPHONE: 11 amino acids

TYPE: amino acids

TYPE: amino acids

TYPE: amino acids

TYPE: mino acids

TOPOLOGY: linear

MOLECULE TYPE: peptide

IMBEDIATE SORRE:

CLONS: CLONS: CLONS: SEQ ID NO: 3:

CLONS: CLONS
Partridge, Bruce
Manning, Shane
TITLE OF INVENTION: Enzymatic Method for Modification of
Recombinant Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match
100.0%; Score 161; DB 4; Length 31;
Best Local Similarity 100.0%; Pred. No. 9.9e-17;
Matches 31; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                        NUMBER OF SECUENCES, 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 3100 No. 6403361west Center
CITY: Minneapolis
STATE: MN
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0;
                                   0; Gaps
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Ouery Match
Best Local Similarity 100.0%; Pred. No. 9.9e-17;
Matches 31; Conservative 0; Mismatches 0; Indels
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                                                                                                                                               RESULT 15
US-09-997-792A-1
Sequence 1, Application US/09997792A
Sequence 1, Application US/09997792A
Sequence 1, Application US/09997792A
STATIAL INCOMMATION:
TITLE NOT INVESTION: Glucagon-Like Peptide-1 Crystals
FILLE REPERENCE: X-10942A
CURRENT FILLING DATE: 2002-09-30
FRION PRION PILING DATE: 2002-09-30
PRION PILING DATE: 1997-12-16
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
SENGTH: 31
TYPE: PRTY
ORGANISM: Homo sapiens
US-09-997-792A-1
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Search completed: October 15, 2003, 10:57:31
Job time : 21.3279 secs

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Sequence 2, Application US/09876388
Patent No. US20020049153A1
GENERAL INFORMATION:
October 15, 2003, 10:55:57; Search time 44.2131 Seconds (without alignments) 112.975 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                              Published_Applications_AA:*

| cgn2_6/ptodata/1/pubpaa/GGO7_PUBCCMB.pep:*
| cgn2_6/ptodata/1/pubpaa/GGO7_PUBCCMB.pep:*
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| cgn2_6/ptodata/1/pubpaa/GGO6_PUBCCMB.pep:*
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| cgn2_6/ptodata/1/pubpaa/GGO_NEW_PUB.pep:*
            GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                              US-09-719-410-3
161
1 HABGTFTSDVSSYLBGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                 600653 seqs, 161128416 residues
                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                           OM protein - protein search, using sw model
                                                                                                                                                                              Scoring table: BLOSUM62 Gapext 0.5
                                                                                                                                                                                                                                                                Minimum DB seq length: 0 Maximum DB seq length: 20000000000
                                                                                                                               ritle:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                   Database :
                                                                                                                                                                                                                  Searched:
                                                                                  Run on:
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Sequence 2, Appli Sequence 1, Appli Sequence 2, Appli Sequence 2, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 2, Appli Sequence 1, Appli

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		Too or in the contract of the	Description	Sequence 2, Appli	Sequence 3, Appli	~	Sequence 3, Appli	Sequence 3, Appli	Sequence 3, Appli	Sequence 1, Appli	Sequence 1, Appli	2,7	7,7	Sequence 19, Appl	Sequence 1, Appli	Sequence 3, Appli	Sequence 3, Appli	'n	
ON THE PARTY OF		·		US-09-876-388-2	US-09-851-738-3	US-09-805-507-3	US-09-859-804-3	US-09-982-978-3	US-09-953-021B-3	US-09-834-229A-1	US-09-997-792-1	US-10-097-230-2	US-10-072-540A-1	US-10-093-958-19	US-10-169-657-1	US-10-091-258-3	US-10-055-259-3	US-10-287-892-2	
		g	9 :	9	δ	σ	10	10	10	11	7	12	14	13	12	12	15	15	
		Nory Satch Tength DB	17 6 7 7 7 7	31	31	31	31	31	31	31	31	31	31	31	31	31	37	31	
	æ0	Query	110.001	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
		arcon	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	161	161	161	161	161	161	161	161	161	191	161	161	161	161	161	
	•	Result No	2	rt	Cł	ęή	4	ហ	છ	7	æ	6	10	11	12	13	14	15	

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Gaps

0

Indels

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## GENERAL INFORMATION

## GENERAL INFORMATION

## APPLICANT: Bridon, Daningue P.

## APPLICANT: E. Archeveque, Benoit

## APPLICANT: E. Lann M.

## APPLICANT: Leblanc, Anouk

## APPLICANT: S. Pierre, Serge

## ITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES

## ITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES

## ITLE OF INVENTION NUMBER: 09/624, 618

## PRIOR FILING DATE: 2001-09-16

## PRIOR PILING DATE: 2000-09-05

## PRIOR PILING DATE: 1399-10-15

## ITLE OF INVENTION NUMBER: 60/134,406

## ITLE OF INVENTION: Peptide

## INFORMATION: Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 161; DB 9; Best Local Similarity 100.0%; Pred. No. 5.2e-17; Matches 31; Conservative 0; Mismatches 0;
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RESULT 6
US-09-953-021B-3
Sequence 3, Application US/09953021B
Sequence 3, Application US/09953021B
Sequence 3, Application US/09953021B
GENERAL INFORMATION:
SEPLICANT: COLIDER PROPERTY COLIDER PROPERTY SHIPLES TO SET TO SEP TIME OF INVENTION: Reperfused Skeletal Muscle Tissue
GENERAL INFORMATION:

APPLICANT: COOLIDGE, THOMAS R.

APPLICANT: COOLIDGE, THOMAS R.

APPLICANT: COOLIDGE, MARIO
TITLE OF INVENTION: PREATHER TO A CUTE CORONARY SYNDROME WITH GLE-1
FILE REPERENCE: 089107/0395

CURRENT PELLIGE DATE: 2001-05-18

PRIOR APPLICATION NUMBER: 60/205,239

PRIOR APPLICATION NUMBER: 60/205,239

PRIOR APPLICATION NUMBER: 60/205,239

NUMBER OF SEO ID NOS: 13

SEO ID NO 3

LENGTH: 21

CYPE: PRT

ORGANISM: Unknown Organism

PRAUTRE:

CTHER INFORMATION: peptide

US-09-859-804-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
US 09-98-2-978-3
US 09-98-3-98-3
US 09-98-3-98-3
US 09-98-3-98-3
US 09-98-3-98-3
US 09-98-3-98-3-98-3
US 09-98-3-98-3-3
US 09-98-3-3
US 09-98-3
US 09-98
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1 OTHER INFORMATION: Description of Unknown Organism: Mammalian GLP:
1 OTHER INFORMATION: Peptide
15-098-978-378-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 161; DB 10; Length 31; Best Local Similarity 100.0%; Pred. No. 5.2e-17; Matches 31; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŏ
                                                                                                                                                                                                                                     Sequence 3, Application US/09851736
Sequence 3, Application US/09851736
Sequence 3, Application US/09851736
Setent No. US20020055460A1
GENERAL INFORMATION:
APPLICANT: COOLIGGe, Thomas R.
TITLE OF INVENTION: Metabolic Intervention with GLP-1 to Improve the Function of TITLE OF INVENTION: Ischemic and Repeifused Tissue
TITLE OF INVENTION: Ischemic and Repeifused Tissue
TITLE OF INVENTION: UNGBER: US/09/681,738
CURRENT APPLICATION NUMBER: US/09/681,738
SUCRENT FILING DATE: 1999-04-30
NUMBER OF SEC ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEG ID NOS: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3, Application US/09805507; Patent No. US20020098195A1
; Patent No. US20020098195A1
; GENERAL INFORMATION:
; APPLICANT: COLIDGE, THOMAS R.
; APPLICANT: COLIDGE, THOMAS R.
; APPLICANT: COLIDGE, THOMAS R.
; TITLE OF INVENTION: TREATMENT OF ACUTE CORONARY SYNDROME WITH GLP-1
FILE REFERENCE: 089187/0395
; CURRENT FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 09/859,804
; PRIOR PILING DATE: 2001-05-18
; SOFTWARR: PatentIn Wer. 2.1
; SEQ ID NO 3
: LENGTE: 31
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PORGANISM: Onknown Organism
PORGANISM: OTHER INFORMATION: Description of Unknown Organism: Mammalian GLP
OTHER INFORMATION: peptide
US-09-808-507-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 161, DB 9; Length 31; Best Local Similarity 100.0%; Pred, No. 5.2e-17; Matches 31; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Watch 100.0%; Score 161, DB 9; Length 31; Best Local Similarity 100.0%; Pred. No. 5.2e-17; Matches 31; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 HAEGTFTSDVSSYLEGQAAKEFTAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 HARGTPTSDVSSYLEGGAAKEFIAWLVKGRG 31
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$1.09-859-804-3

$1.589uence 3, Application US/09859804

$2.00201072061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
CRGANISM: mammalian
US-09-851-738-3
                                                                                                                                                                                                RESULT 2
US-09-851-738-3
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us-09-719-410-3.rapb

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RESULT 9

US-10-097-230-2

Sequence 2, Application US/10097230

Sequence 2, Application Wold09230

Publication No. US20030186436al

GENERAL INFORMATION:

APPLICANT: Bul, Hongxiang

ITILE OF INVENTION: Glucose-Dependent Insulin-Secreting Cells Transfected with a

ITILE OF INVENTION: Glucose-Dependent OFP-1

OURRANT APPLICATION NUMBER: US/10/097,230

CURRANT PILING DATE: 2002-03-12

NUMBER OF SEQ ID NOS: 9

SOFTWARE: Patentin Version 3.1

SEQ ID NO 2

LENGTH: 31

TYPE: FRI

TYPE: FRI

GRANISM: Homo sapiens
US-10-097-230-2
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                   Query Match 100.0%; Score 161; DB 11; Length 31; Best Local Similarity 100.0%; Pred. No. 5.2e-17; Matches 31; Conservative 0; Mismatches 0; Indels
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195-10-072-540A-1

Sequence 1. Application US/10072540A

Publication No. US20020123466A1

GENERAL INFORMATION:

APPLICANT: HOffmann, James

TILLE REPRENCE: X.11368A

FILL REPRENKE: X.11368A

CURRENT FILING DATE: 1997-12-05

PRIOR APPLICATION WNDER: US 60/057,600

PRIOR FILING DATE: 1997-12-05

NUMBER OF SEQ ID NOS: 5

SEGTWARE: Patentin version 3.1

LENGTH: 31

TYPE: PRT

USPE: PRT

USCANISM: Homo sapiens

US-10-072-540A-1
                                                                                                                                                                                                   1 HAEGIFTSDVSSYLEGQAAKEFIAWLVKGRG 31
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US-10-093-958-19
; Sequence 19, Application US/10093958
; Publication No. US20030044423A1
; GRNERAL INFORMATION:
; APPLICANT: Gillies, Stephen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 7
US-09-834-229A-1
US-09-834-229A-1
SEQUENCE 1, APPLICATION US/09834229A
PUBLICATION NO. US20030022823A1
GENERAL INFORMATION:
APPLICARY: Effectio, Stad
TITLE OF INVENTION: USE OF GLP-1 OR ANALOGS IN TREATMENT OF MYOCARDIAL INFARCTION
TITLE OF INVENTION: USE OF GLP-1 OR ANALOGS IN TREATMENT OF MYOCARDIAL INFARCTION
CURRENT APPLICATION NUMBER: US/09/834,229A
CURRENT FILING DATE: 1997-08-21
PRIOR PELICATION NUMBER: US 06/915,918
PRIOR PELICATION NUMBER: US 06/024,980
PRIOR PERIOR PELICATION NUMBER: US 06/024,980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 161; DB 10; Length 31; Best Local Similarity 100.0%; Pred. No. 5.2e-17; Matches 31; Conservative D; Mismatches 0; Indels
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US-09-997-792-1

Sequence 1. Application US/0999792

Publication No. US20030045464A1

SERREAL INFORMATION:
APPLICANT: Hermeling, Ronald
APPLICANT: Hoffmann, Chakravarthy
TILE REPREMENE: X-10242

CURRENT FILING DATE: 2001-11-30

NUMBER OF SEQ IN NOS: 29

SOFTWARE PARENTING NOS: 29

SOFTWARE PARENTING NOS: 29

SOFTWARE PARENTING NOS: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: P03660US6

CURRENT APPLICATION NUMBER: US/09/953,021B

CURRENT PILING DATE: 2001-09-11

PRIOR APPLICATION NUMBER: 09/302,556

PRIOR FILING DATE: 1999-04-30

NUMBER OF SEQ ID NOS: 13

SEQ ID NO 3

LENGTH: 31
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; ORGANISM: Homo sapiens
US-09-834-229A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; LENGTH: 31
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-997-792-1
                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
US-09-953-021B-3
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us-09-719-410-3.rapb

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RESULT 14

US-10-055-259-3

Sequence 3, Application US/10055259

Publication No. US20030091807A1

GENERAL INFORMATION:
APPLICANT: HOLSt, Jens J.
APPLICANT: Wilsboll, Tha
TITLE DE INVENTION: GLPL-1 AS A DIAGNOSTIC TEST TO DETERMINE Beta-CELL FUNCTION AND TITLE OF INVENTION: DRESENCE OF THE CONDITION OF IGT AND TYPE-II DIABETES; CURRENT REPLIANCE NOTHER: US/10/055,259

CURRENT FILMS DATE: 2002-06-21

NUMBER OF SEQ ID NOS: 13

SEQ ID NO 3: LENGTH: 31

IENGTH: 31

TYPE: PRI
TYPE: PRI
TYPE: PRI
US-10-055-259-3
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| Sequence 2, Application US/10287892
| Publication No US20030108557A1
| APPLICANT: Bridon, Dominique P. APPLICANT: Bridon, Dominique P. APPLICANT: Bridon, Dominique P. APPLICANT: Brin, Alan M. APPLICANT: Brin, Alan M. APPLICANT: Boines, Darren L. APPLICANT: Boines, Darren L. APPLICANT: Boines, Darren L. APPLICANT: Boines, Darren L. APPLICANT: St. Pierre, Serge
| TILLE OF INVENTION: LONG LASTING SYNTHETIC GLUCAGON LIKE PEPTIDE (GLP-1)
| PRIOR REPERENCE: 500852004612
| CURRENT APPLICATION NUMBER: US/10/287,892
| CURRENT APPLICATION NUMBER: 09/655,332
| PRIOR PLINKO DATE: 1999-10-15
| NUMBER OF SEQ ID NGS: 35
| SEG ID NGS: 35
| SEG ID NGS: 35
| TYPE: PRI
| TYPE: PRI
| TYPE: PRI
| TYPE: PRI
| COMPANIENT: Artificial Sequence |
| FERRITURE:
| COMPANIENT: Artificial Sequence |
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US-10-287-892-2
                                                                                                                                                                                                                                                ö
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                                                                                                                                                                        Length 31;
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                                                                                                                                                                                                                                                                                                               1 HAEGTFISDVSSYLEGQAAKEFIAWLVKGRG 31
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                ; TYPE: PRT; ORGANISM: mammalian US-10-091-258-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 15
US-10-287-892-2
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### APPLICANT: Jeffrey, Way

TITLE OF INVENTION: Expression Technology for Proteins Containing a Hybrid Isotype And TITLE OF INVENTION: Mobery

TITLE OF INVENTION: Mobery

TITLE OF INVENTION: Mobery

TITLE OF INVENTION: Mobers: 10.000-03-07

CURRENT APPLICATION NUMBER: US.60/274,096

PRIOR FILING DATE: 2001-03-07

PRIOR FILING DATE: 2001-03-07

NUMBER: OF SEQ ID NOS: 50

SEQ ID NO 19

LENGTH: 31

TYPE: PRT

ORGANISH: artificial sequence

FRATURE:

ORGANISH: artificial sequence

FRATURE:

OTHER INFORMATION: glucagon-like peptide 1

US-10-093-958-19
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US-10-091-258-3
US-10-091-258-3
US-10-091-258-3
Fublication No. US/10091258
Fublication No. US/20030073626A1
GENERAL INFORMATION:
APPLICANT: COOLIGGO, Thomas R
APPLICANT: COOLIGGO, Thomas R
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATING PERIPHERAL VASCULAR DISEASE
FILE OF INVENTE APPLICANTON NUMBER: US/10/091,258
CURRENT APPLICANTON NUMBER: US/10/091,258
NUMBER OF SEQ ID NOS: 13
SOFTHARE: Patentin version 3.1
LENGTH: 31
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US-10-169-657-1

US-10-169-657-1

Sequence 1, Application US/10169657

Fublication No. US20030060412A1

GENERAL INFORMATION:

TITLE OF INVENTION: Process for Solubilizing Glucagon-Like Peptide 1 Compounds

TITLE OF INVENTION: Process for Solubilizing Glucagon-Like Peptide 1 Compounds

TITLE OF INVENTION: Process for Solubilizing Glucagon-Like Peptide 1 Compounds

TITLE OF INVENTION: Process for Solubilizing Glucagon-Like Peptide 1 Compounds

TITLE OF INVENTION: Process for Solubilizing Glucagon-Like Peptide 1 Compounds

TITLE OF INVENTION: Process for Solubilizing Glucagon-Like Peptide 1 Compounds

TITLE OF INVENTION: Process for Solubilizing Glucagon-Like Peptide 1 Compounds

TITLE OF TILING DATE: 2000-06-28

FRIOR FILING DATE: 2000-01-27

FRIOR FILING DATE: 2000-01-27

FRIOR FILING DATE: 2000-08-09

NUMBER OF SEQ ID NOS: 36

SOUTH NOS: 36

CORGANISM: Momo Sapiens

US-10-169-657-1
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us-09-719-410-3.rapb

Best Local Similarity 100.0%; Pred. No. 5.2e-17;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps

0;

Search completed: October 15, 2003, 11:09:32 Job time : 45.2131 secs

QZ Dp

Searched:

Run on:

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Sequence 3, Appli
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application PC/TUSO143165
GENERAL INFORMATION:
APPLICANT: B1 Lilly and Company
TITLE OF INVENTION: Gill-1 FUSION PROTEINS
FILE REPERENCE: x-13991
CURRENT APPLICATION NUMBER: PCT/USO1/43165
CURRENT FILING DATE: 2002-10-10
PRIOR APPLICATION NUMBER: US 60/251,954
PRIOR FILING DATE: 2000-06-12
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin Version 3.1
LENGTH: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
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PCT-US01-43165-1
RESULT 1
PCT-US01-43165-1
    Sequence 1, Appli
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                                                                                                                            October 15, 2003, 10:53:17; Search time 295.262 Seconds (without alignments) 95.354 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Result Query No. Score Match Length DB ID Description 161 106.0 31 1 PCT-US01-43165-1 Sequence 1,
                                                                                                                                                                                                                                                                                                                                                                                         5728757
                   GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                    1 HAEGTFTSDVSSYLEGOAAKEFIAWLVKGRG 31
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                                                                                                                                                                                                                                                                                                                                                   5728757 seqs, 909918778 residues
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Maximum Match 100%
Listing first 45 summaries
                                                                                                OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                       Scoring table: BLOSUM62 Gapext 0.5
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Maximum DB seq length: 2000000000
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161
                                                                                                                                                                                                                  Title:
Perfect score:
Sequence:
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us-09-719-410-3.rapm

Вb

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Sequence 3, Application PC/TUS0231693A
; Sequence 3, Application PC/TUS0231693A
; GENERAL INFORMATION:
APPLICANT: Bayer Corporation
APPLICANT: Pan. Clark
APPLICANT: Pan. Clark
APPLICANT: Clark
APPLICANT: APPLICANT: Clark
APPLIC
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Sequence 21, Application PC/TUSO25227

Sequence 21, Application PC/TUSO25227

GENERAL INFORMATION

APPLICANT: Radsworth, Samuel C.

APPLICANT: Armentano, Donna

APPLICANT: Armentano, Donna

APPLICANT: Persons, Geoffrey

TITLE OF INVENTION: Methods of Treating Diabetes and Other

TITLE OF INVENTION: Methods of Treating Diabetes and Other

TITLE OF INVENTION: Methods of Treating Diabetes and Other

TITLE OF INVENTION: Methods of Treating Diabetes

FILE REPRENUE: 2478 2019012 PCT

CURRENT APPLICATION WIMBER: PCT/US02/2527

CURRENT APPLICATION NUMBER: US 60/310,982

PRICE APPLICATION NUMBER: US 60/310,982

NUMBER OF SEQ ID NOS: 54

SOFTWARE: PART APPLICATION NUMBER: US 60/310, 382

ITME: PRAINTED DATE: 2000-08-08

NUMBER OF SEQ ID NOS: 54

SOFTWARE: PRAINTED:

TITLE: PRAINTED:

FRAINTED:

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 161; DB 1; Length 31; Best Local Similarity 100.0%; Pred, No. 2.1e-16; Matches 31; Conservative 0; Mismatches 0; Indels
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PRIOR APPLICATION NUMBER: 60/314,573;
PRIOR FILING DATE: 2001-08-23
NUMBER OF SEQ ID NOS: 3
SOFTWARE: Patentin version 3.1
SEQ ID NO 3
LENGTH: 31
TYPE: PRT
ORGANISM: Homo saplens
PCT-US02-21325-3
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PCT-US02-25227-21
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PCT-USO2-31693A-3
                                                                                                                                                                                                                         RESULT 2

PCT-G020-C7011-19

SCHERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Lexigen Pharmaceuticals Corp.
APPLICANT: Gillies, Stephen
APPLICANT: Gillies, Stephen
APPLICANT: Gillies, Stephen
APPLICANT: May Jeffrey
TITLE OF INVENTION: Expression Technology for Proteins Containing a Hybrid Isotype AI
TITLE OF INVENTION: Moievy
TITLE REPERENCE: LEX-016FC
CURRENT FILING DAIE: 2002-03-07
PRIOR PILING DAIE: 2001-03-07
NUMBER OF SEQ ID NOSE: 50
NUMBER OF SEQ ID NOSE: 50
SEQ ID NO 19
SEQ ID NO 19
THENCES PLANCES PLANCES OF THE NOSE: 50
MUMBER OF SEQ ID NOSE: 50
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POT-1908-13088-3
FOTUREAL INPORATION:
Sequence 3, Application PC/TUS0213088
GENERAL INPORATION:
TILLE OF INVENTION: METGODS AND COMPOSITIONS FOR TREATING CONDITIONS ASSOCIATED WITH TILLE OF INVENTION: RESISTANCE
TILLE OF INVENTION: RESISTANCE
CURRENT PFLIATO DATE: 2002-04-24
CURRENT PFLIATO DATE: 2002-04-24
NUMBER OF SEQ ID NOS: 13
SEQ ID NO 3
ILBNGTH: 31
TYPE: PRT
ORGANISH: 31
CORGANISH: Mammalian
PCT-1902-13088-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
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GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Glucagon-Like Peptide-1 Analogs
FILE REPERENCE: X-15045
CURRENT APPLICATION NUMBER: PCT/US02/21325
CURRENT FILING DATE: 2002-08-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.0%; Pred. No. 2.1e-16;
Matches 31; Conservative 0; Mismatches 0;
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PCT-US02-21325-3
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APPLICANT: Perg, L.
APPLICANT: Ria, U.
APPLICANT: Na, U.
APPLICANT: Xia, U.
APPLICANT: Xia, U.
APPLICANT: APPLICANTON: Methods and DNA Constructs for High Yield Production of Polyr
TILE REPERENCE: 1627,009001
CURRENT APPLICATION NUMBER: PC7/US03/16645
CURRENT FILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 93
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 5
LENGTH.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 HABGIFTSDVSSYLEGGAAKEFIAWLVKGRG 31
                      : 5, Application PC/TUS0316645 INFORMATION:
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NAME: MACIAL, RONGER: 35_262
REFERENCE/OCKET NUMBER: X-997
TELECOMMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
TELETRIC: (317)27-1997
INFORMATION FOR SEQ. ID NO: 3;
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; FEATURE:
; CIHER INFORMATION: GLP-1(7-37)
PCT-US03-16645-5
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TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US97-01978-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10 -
PCT-US97-01978-3
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PCT-US03-16643-32

Sequence 32, Application PC/TUS0316643

Sequence 32, Application PC/TUS0316643

Sequence 32, Application PC/TUS0316643

SEPLICANT: Wagner, F.

APPLICANT: Manguist, B.

TILE REPRENTE 120, 101001

TILE REPRENTED BY 100, 101001

CURRENT APPLICATION NUMBER: PCT/US03/16643

CURRENT FILING DATE: 2003-05-23

PRICA PAPLICATION NUMBER: US 60/383,370

PRICA PLILING DATE: 2002-05-24

NUMBER OF SEQ ID NOS: 148

SEQ ID NO 32

LENGTH: 31

LENGTH: 31
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                                                                                                                                                                       0;
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PCT-1503-0001-5
Sequence 5. Application PC/TUS030001
GENERAL INFORMATION:
FAPLICART ELI LILLY AND COMPANY
TITLE OF INVENTION: EXTENDED GLUCAGON-LIKE PEPTIDE-1 ANALOGS
FILE REPERRORS X-15133
CURRENT PELLING NUMBER: PCT/US03/00001
CURRENT PLING DATE: 2003-01-03
NUMBER OF SEQ ID NOS: 60
SOFTWAREN PLING DATE: 2003-01-03
SEQ ID NO 5
IDENCIF 31
TYPE: PRI TYPE: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 161; DB 1; Length 31; Best Local Similarity 100.0%; Pred. No. 2.1e-16; Matches 31; Conservative 0; Mismatches 0; Indels
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Best Local Similarity 100.0%; Pred. No. 2.16-16;
Matches 31; Conservative 0; Mismatches 0; Indels
                                                                                                                 Query Match 100.0%; Score 161; DB 1; Length 31; Best Local Similarity 100.0%; Pred. No. 2.1e-16; Matches 31; Conservative 0; Mismatches 0; Indels
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; OTHER INFORMATION: GLP-1(7-37).
PCT-US03-16643-32
; TYPE: PRT; ORGANISM: Homo sapiens
PCT-US02-31693A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 9
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APPLICANT: Larson, Eric R.

IITLE OF INVENTION: GIUCAGON-LIKE PEPTIDE AND INSULINOTROPIN
IITLE OF INVENTION: GIUCAGON-LIKE PEPTIDE AND INSULINOTROPIN
INTERPOSED SEAGURES:
COCRESPONDENCE ADDRESS:
ADDRESSE: Greeg C. Benson, Pfizer Inc
STREET: Bactern Point Road
CITY: Groton
STREET: CACON STREET: C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 100.0%; Score 161, DB 3; Length 31; Best Local Similarity 100.0%; Pred. No. 2.1e-16; Matches 31; Conservative 0; Mismatches 0; Indels
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APPLICANT: Kin, Yesook
APPLICANT: Kin, Yesook
APPLICANT: Galfand, Robert A.
APPLICANT: Gelfand, Robert A.
APPLICANT: Geoghegan, Kieran F.
APPLICANT: Geoghegan, Kieran F.
APPLICANT: Geoghegan, Kieran F.
APPLICANT: Danley, Dennis E.
TITLE OF INVENTION: Prolonged Delivery of Peptides
NUMBER OF SEQUENCES: 7
CORRESCONDENCE ADDRESS:
ADDRESSEE: Pfizer Inc
STREET: A35 East 42nd Street, 20th Floor
CITY: New York
COUNTRY: O.S.A.
ZIP: 10017-5755
COMPUTER: New York
COMPUTER: IBM PC COMPATIBLE
COMPUTER: IBM PC COMPATIBLE
COMPUTER: IBM PC COMPATIBLE
COMPUTER: IBM PC COMPATIBLE
COMPOTER: TEMP PC COMPATIBLE
COMPOTER: PATHOLICATION DATA:
APPLICATION NUMBER: US/08/044,133
FILING DATE: O'-APR-1993
CLASSIFICATION: SANT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 31 amino acids TYPE: AMINO ACID
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MOLECULE TYPE: peptide
US-07-899-073-2
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US-08-044-133-2
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                                                              Query Match 100.0%; Score 161; DB 1; Length 31; Best Local Similarity 100.0%; Pred. No. 2.1e-16; Matches 31; Conservative 0; Mismatches 0; Indels
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PCT-0598-26480-1
Sequence 1, Application PC/TUS9826480A
Sequence 1, Application PC/TUS9826480A
GENERAL INFORMATION:
APPLICANT: Eli Lilly and Company
ITILE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
FILE REPREBENCE: X-10342 PCT
CURRENT APPLICATION UNBER: PCT/US98/26480A
CURRENT APPLICATION UNBER: US 60/069728
EARLIER FILING DATE: 1997-12-16
SARLIER FILING DATE: 1997-12-16
SOFTWARE OF SEQ ID NOS: 4
SOFTWARE PERCENTIN VOIC: 2.0
SOFTWARE PARCELLY PARCELLY OF SEQ ID NO: 4
SOFTWARE PARCELLY PARCELLY OF SEQ ID NO: 4
SOFTWARE PARCELLY PARCE
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US-07-899-073-2
Sequence 2, Application US/07899073
GENERAL INFORMATION:
APPLICANT: Andrews, Glenn C.
APPLICANT: Dauny, Gaston O.
APPLICANT: Francoeut, Michael L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 31
TYPE: PRT
CRGANISM: Homo sapiens
PCT-US98-26480-1
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Search completed: October 15, 2003, 11:07:20 Job time : 296.262 secs
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US-08-350-709-12
Sequence 12. Application US/08350709
GENERAL INFORMATION:
APPLICANT: RUSHIMURA, MASATO
APPLICANT: RUSHIMURA, MASATO
APPLICANT: FUNCUA, ISUNBHIKO
ITILE OF INVENTION: METHICO FOR PRODUCING A PEPTIDE
NUMBER OF INVENTION: METHICO FOR PRODUCING A PEPTIDE
NUMBER OF SUDURNES: 36
CORRESPONDENCE ADDRESS:
ADDRESSER: CUSHMAN
STREET: 130 WATER STREET
CITY: BOSTON
STREET: 130 WATER STREET
CITY: BOSTON
STATE: MASACHUSETTS
COUNTRY: US
ZIP: 102109
COMPUTER READABLE FORM:
MEDLUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SSTEM: PC-005/MS-DOS
SOFFWARE: Patentin Release #1.0, Version #1.25
CLASSIFICATION ADAR:
APPLICATION ADAR:
APPLICATION DAPA:
APP
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REGISTRATION NUMBER: 31,304
REPERRENCE/DOCKET NUMBER: PC8391
TELECOMMUNICATION THEORNATION:
TELEFAX: (212)573-1189
TELEFAX: N/A
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 31 anino acids
TYPE: anino acids
STRANDEDAMS: single:
TYPE: anino acids
STRANDEDAMS: Single:
TOPOLOGY: linear
HYDOTHETICAL: NO
REAGENT TYPE: peptide
HYDOTHETICAL: NO
REAGENT TYPE: N-terminal
ORIGINAL SOURCE:
CRIALINE: N/A
INDIVIDUAL ISOLATE: N/A
INDIVIDUAL ISOLATE: N/A
INDIVIDUAL SOURCE:
LEMBERAY: N/A
ILMEDIATE SOURCE:
LEMBERAY: N/A
TONNY: N/A
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POSITION IN GENOME:
CHROMOSOME, SEGRENT:
NAP POSITION: N/A
UNITS: N/A
US-08-044-135-2
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Query Match 100.0%; Score 161; DB 7; Length 31; Best Local Similarity 100.0%; Pred. No. 2.1e-16; Matches 31; Conservative 0; Mismatches 0; Indels
PILING DATE: 19-FEB-1991

PRIOR APPLICATION DATA:
APPLICATION NUMERR: JB 0271438-1991
FILING DATE: 19-027-1991
PRIOR APPLICATION NUMER: DF 027724-1991
FILING DATE: 24-027-1991
FRIOR APPLICATION NUMER: JP 0277724-1991
FRIOR APPLICATION NUMER: JP 0198056-1991
FRIOR APPLICATION NUMER: JP 0198056-1991
ATTORNEY AGENT INFORMATION:
NAME: WILLIAMS, GREGORY D.
REGISTRATION NUMERS: 3001
FREFENCE/DOCKET NUMBER: 41614
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION OF SEG 10 NO: 12:
SEQUENCE CHARACTERISTICS:
LENGRAT: 30100 acid
TYPE: amino acid
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Sequence 29, Appl Sequence 115, Appl Sequence 117, Appl Sequence 113, Appl Sequence 111, Appl Sequence 111, Appl Sequence 103, Appl Sequence 104, Appl Sequence 117, Appl Sequence 117, Appl Sequence 117, Appl Sequence 117, Appl Sequence 121, Appl Sequence 8, Appli
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POT-1963-11595B-16
Sequence 16, Application PC/TUS0315395B
GENERAL INFORMATION:
PAPLICANT: B1 L111y and Company
TITLE OF INVERTION: MODIFIED GLUCAGON-LIKE PEPTIDE-1 ANALOGS
FILE REFERENCE: X-15642
CURRENT APPLICATION WINDER: PCT/US03/15395B
CURRENT FILING DATE: 2003-06-02
SOFTWARE: PATENTING DATE: 2003-06-02
SOFTWARE: PATENTING DATE: 2003-06-02
SOFTWARE: PATENTING SATENTING STATEMENT OF SEQ ID NO.16
SEQ ID NO.16
SEQ ID NO.16
SEG ID NO.16
FERNORM: ATLIFICIAL
COMBANISM: ATLIFICIAL
COMBANISM: ATLIFICIAL
COMBANISM: ATLIFICIAL
COMBANISM: Synthetic construct
PCT-US03-15395B-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 161; DB 1; Length 31; Best Local Similarity 100.0%; Pred. No. 3.2e-15; Matches 31; Conservative 0; Mismatches 0; Indels
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PCT-US03-26818-64
; Sequence 64, Application PC/TUS0326818
; Sequence 64, Application PC/TUS0326818
; Sequence 64, Application:
; APPLICANT: PRIOR, Christopher P.
; APPLICANT: LAI, Char-Buei
; APPLICANT: SADGRI, HOMADOUN
; APPLICANT: TURER, Andrew J.
; TITLE OF INTERNIOR: MODIFIER POTORINS
; FILE REFERENCE: 54710-5001-01-W0
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US 60/406,977
; PRIOR APPLICATION NUMBER: US 60/406,977
; PRIOR APPLICATION NUMBER: US 10/378,094
; PRIOR FILING DATE: 2003-03-04
; MUMBER OF SEC ID NOS: 90
; SOFTWARE: PREFET NOS: 90
; SEC ID NO 64
; TYPE: PRI
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sequence 16, Appl
Sequence 2, Appl
Sequence 2, Appl
Sequence 27, Appl
Sequence 27, Appl
Sequence 27, Appl
Sequence 28, Appl
Sequence 147, Appl
Sequence 147, Appl
Sequence 147, Appl
Sequence 14, Appl
Sequence 11, Appl
Sequence 1, Appl
Sequence 1, Appl
Sequence 1, Appl
Sequence 24, Appl
Sequence 34, Appl
Sequence 34, Appl
Sequence 36, Appl
Sequence 37, Appl
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                                                                                                                            October 15, 2003, 10:53:47; Search time 15.2459 Seconds (without alignments) 62.284 Million cell updates/sec
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1. /cgn2_6/ptcdata/1/paa_VCT_NEW_COMB.pep:*

1. /cgn2_6/ptcdata/1/paa_VGS6_NEW_COMB.pep:*

3. /cgn2_6/ptcdata/1/paa_VGS0_NEW_COMB.pep:*

4. /cgn2_6/ptcdata/1/paa_VGS0_NEW_COMB.pep:*

5. /cgn2_6/ptcdata/1/paa_VGS0_NEW_COMB.pep:*

6. /cgn2_6/ptcdata/1/paa_VGS0_NEW_COMB.pep:*

7. /cgn2_6/ptcdata/1/paa_VGS0_NEW_COMB.pep:*

7. /cgn2_6/ptcdata/1/paa_VGS0_NEW_COMB.pep:*
                GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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PCT-US03-28018-64
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PCT-US03-28018-64
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PCT-US03-28018-27
US-10-656-405-27
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US-10-656-405-18
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PCT-US03-28018-14
US-10-291-226-114
US-10-291-226-114
US-10-291-256-114
US-10-291-256-114
US-10-656-405-1
US-US-10-656-405-1
US-US-10-656-405-1
US-US-10-656-405-1
US-US-US-10-26778-6
PCT-USO3-26778-6
PCT-USO3-26778-6
PCT-USO3-26778-6
US-US-USO3-26778-6
US-US-USO3-26778-6
US-US-USO3-26778-6
US-USO3-26778-6
US-USO3-28003-300
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161
1 HABGIFISDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                            148013 segs, 30631251 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                              OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 2000000000
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Query
Match Length DB
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Perfect score:
Sequence:
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Query Match

100.0%; Score 161; DB 6; Length 31;
Best Local Similarity 100.0%; Pred. No. 3.2e-15;
Matches 31; Conservative 0; Mismatches 0; Indels
Matches 31; Conservative 0; Mismatches 0; Indels
     Best Local Similarity 100.0%; Pred. No. 3.2e-15; Matches 31; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 HAEGTFTSDVSSYLEGQAAKEKIAWLVKGRG 31
                                                                               RESULT 6
PCT-UG03-28093-27
Sequence 27, Application PC/TUS0328093
, GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT ORGANISM: Homo sapiens PCT-U$03-28093-27
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APPLICANY: Bayer Pharmaceuticals Corporation

APPLICANY: Bayer Pharmaceuticals Corporation

APPLICANY: Whelen, James

APPLICANY: Whelen, James

TITLE OF INVENTION: Methods of Use

CURRENT APPLICATION WINBER: Use 60/408,696

PRIOR PILIAGIOATION WINBER: Use 60/439,369

PRIOR FILING DATE: 2003-09-16

PRIOR FILING DATE: 2003-01-09

NUMBER OF SEQ ID NOS: 34

SEGURARE: Patentin Version 3.2

SEQ ID NO 2

LENGTH: 31
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US-10-291-226-124

Sequence 124, Application US/10291226

Sequence 124, Application US/10291226

SEQUENCE 124, Application US/10291226

SEQUENCE 1 INFORMATION:

APPLICANT: Larsen, Biarne Due

APPLICANT: NAVESIONE

TILE OF INVENTION: NOVEL PEPTIDE AGONISTS OF GLP-1 ACTIVITY

FILE REPRENCE: 55511(4548)

CORRENT APPLICATION NUMBER: US/10/291,226

CORRENT APPLICATION NUMBER: US/09/614,847

PRIOR PILING DATE: 12000-07-12

PRIOR PILING DATE: 12000-07-12

PRIOR APPLICATION NUMBER: US 60/143,591

PRIOR APPLICATION NUMBER: US 60/143,591

PRIOR APPLICATION NUMBER: US 60/143,591

PRIOR PRIOR DATE: 1999-07-13

SEQ ID NO: 24

LENGTH: 31

LENGTH: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 161; DB 1; Length 31; Best Local Similarity 100.0%; Pred. No. 3.2e-15; Matches 31; Conservative 0; Mismatches 0; Indels
                                                                                                                               Query Match 100.0%; Score 161; DB 1; Length 31; Best Local Similarity 100.0%; Pred. No. 3.2e-15; Matches 31; Conservative 0; Mismatches 0; Indels
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                                       CHHER INFORMATION: GLP-1(7-37) amino acid sequence PCT-USO3-26818-64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application PC/TUS0328093 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
OCKANISM: Homo sapiens
FRATURS:
OTHER INFORMATION: GLP-1(7-37)
US-10-291-226-124
) ORGANISM: Artificial sequence; FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
CMGANISM: Homo sapiens
PCT-US03-28093-2
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RESULT 5

US-10-65-405-2

US-10-65-405-2

US-10-65-405-2

Sequence 2. Application US/10656405

Sequence 2. Applications:

APPLICANT: Bayer Panamaceuticals Corporation

APPLICANT: Whelan, James

TITLE OF INVERTION: Modified GLP-1 Receptor Agomists and Their Pharmacological

TITLE REPRENCE: MES-7296

TITLE REPRENCE: MES-7296

CURRENT APPLICATION NUMBER: US/10/656,405

CURRENT PILING DATE: 2003-09-04

PRIOR PILING DATE: 2003-09-16

PRIOR PILING DATE: 2003-09-16

PRIOR FILING DATE: 2003-09-16

SEQ ID NO 2

LENGTH: 31

TENGTH: 31

TENGTH: 31

US-10-656-405-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SABACAL INFORMATION:

SAPLICANT: Bayer Pharmaceuticals Corporation

APPLICANT: Pan, Clark

APPLICANT: Pan, Clark

APPLICANT: Pan, Clark

APPLICANT: Mhelan, James

TITLE OF INVENTION: Modified GLP-1 Receptor Agonists and Their Pharmacological

TITLE OF INVENTION: Mothods of Use

FILE REFERENCE: MSB-7296

CURRENY APPLICATION NUMBER: PCT/US03/28093

CURRENY APPLICATION NUMBER: PCT/US03/28093

FRIOR FILING DATE: 2002-09-16

PRIOR FILING DATE: 2002-09-16

PRIOR FILING DATE: 2003-01-09

NUMBER OF SEQ ID NOS: 34

SEQ ID NO 27

LENGRAL 22

LENGRAL 23

LENGRAL 23
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RESULT 11
2-10-565-405-28
Sequence 28, Application US/10656405
GENERAL INFORMATION:
APPLICANT: Bayer Pharmaceuticals Corporation
APPLICANT: Pay. Clark
RESULT 7

Sequence 27, Application US/10656405

Sequence 27, Application US/10656405

GENERAL INFORMATION:
APPLICANT: Bayer Planamecuticals Corporation
APPLICANT: Pan, Clark
APPLICANT: Pan, Clark
APPLICANT: Whelan, James
TITLE OF INVENTION: Medified GLP-1 Receptor Agonists and Their Pharmacological
TITLE OF INVENTION: Medified GLP-1 Receptor Agonists and Their Pharmacological
TITLE OF INVENTION: Medified GLP-1 Receptor Agonists and Their Pharmacological
TITLE OF INVENTION: Medified GLP-1 Receptor Agonists and Their Pharmacological
CURRENT FILING DATE: 2003-09-04
FRIOR PILING DATE: 2003-09-04
FRIOR APPLICATION NUMBER: US 60/408,696
FRIOR PILING DATE: 2003-09-16
FRIOR PILING DATE: 2003-09-06
FRIOR FILING DATE: 2003-09-06
FRIOR FILING DATE: 2003-09-06
FRIOR FILING SAD ID NOS: 34
SOFTWARE: Patentin Version 3.2
IENSTH: 32
TENSTH: 32
CRASANISH: Home Sapiens
US-10-656-405-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT ORGANIZAR: Artificial Sequence CRAHURE: OTHER INFORMATION: Description of Artificial Sequence: Gly8-GLP-1(7-37) US-10-291-225-123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels 0; Gaps
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US-10-291-226-123

Sequence 123, Application US/10291226

Sequence 123, Application US/10291226

SEQUENCE INFORMATION:

APPLICANT: Mixkelsen, Jens Mollgaard

TILL REPERBAUCE: 555.11 (45487)

CURRENT APPLICATION NUMBER: US/09/614,847

PRIOR APPLICATION NUMBER: US/09/614,847

PRIOR PLICATION NUMBER: US/09/614,847

PRIOR PLICATION NUMBER: US/09/614,847

PRIOR FILING DATE: 12000-07-12

PRIOR FILING DATE: 12999-07-13

NUMBER OF SEQ ID NOS: 153

SOFTWARE: Zatentin Ver. 2.1

LENGTH: 21

LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.0%; Score 161; DB 6; Length 32; Best Local Similarity 100.0%; Pred. No. 3.2e-15; Matches 31; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 97.5%; Score 157; DB 6; Length 31; Best Local Similarity 96.8%; Pred. No. 1.1e-14; Matches 30; Conservative 0; Mismatches 1; Indels
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PCT-US03-28093-28
Sequence 28, Application PC/TUS0328093
SEQUENCE 1NPORATION:
RENUERAL INFORMATION:
APPLICANT: Bayer Pharmaceuticals Corporation
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APPLICANT: Pan, Clark
APPLICANT: Whelan, James
TITLE OF INVENTION: Modified GLP-1 Receptor Agonists and Their Pharmacological
TITLE OF INVENTION: Modified GLP-1 Receptor Agonists and Their Pharmacological
TITLE OF INVENTION: Modified GLP-1 Receptor Agonists and Their Pharmacological
CURRENT PRINCE: MSB-7266
CURRENT PILING DATE: 2003-09-04
PRIOR FILING DATE: 2002-09-16
PRIOR FILING DATE: 2009-01-09
PRIOR FILING DATE: 2009-01-09
NUMBER OF SEQ ID NOS: 34
SORTWARE: PATENTIN VERSION 3.2
LENGTH: 32
ITYPE: PRT
CORGANISM: Homo sapiens
PCT-US03-28093-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
08-10-291-226-147
: Sequence 147, Application US/10291226
: GENERAL INFORMATION:
: APPLICANT: LArsen, Bjarne Due
: APPLICANT: Mixelsen, Jens Moligaard
: APPLICANT: Move, SOTE
: TITLE OF INVENTION: NOVEL PEPTIDE AGONISTS OF GLP-1 ACTIVITY
: FILE REFERENCE: 55511(45487)
: CURRENT FILING DATE: 2002-11-08
: FRIOR PILING DATE: 12000-07-12
: PRIOR APPLICATION NUMBER: US 60/143,591
: PRIOR FILING DATE: 1999-07-13
: NUMBER OF SEQ ID NOS: 153
: SOTUMBE: PatentIn Ver. 2.1
: SEQ ID NO.147
: WYDE: NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Artificial Sequence
FRATURE:
NAME/KEY: MOD_RES
LOCATION: (32)
CTHER INFORMATION: Lys(palmitoyl)
FRATURE:
OTHER INFORMATION: Description of Artificial Sequence:
CTHER INFORMATION: G1y8-G1p-1(7-36)-Lys37(palmitoyl)(Human)
US-10-291-226-147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 97.5%; Score 157; DB 1;
Best Local Similarity 96.8%; Pred. No. 1.1e-14;
Matches 30; Conservative 0; Mismatches 1;
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us-09-719-410-3.rapn

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RESULT 15
FORTHER 128093-1
FORTHER 12809
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PCT-10803-26818-48

Sequence 46, Application PC/TUS0326818

GENERAL INFORMATION:
APPLICANT: PRIOR.
APPLICANT: PRIOR.
APPLICANT: SADEGII, Homapoun
APPLICANT: SATIO-GIO.01-WO
CURRENT APPLICATION NUMBER: PCT/US03/26818
PRIOR APPLICATION NUMBER: US 60/406,977
PRIOR PLING DATE: 2002-08-30
PRIOR PLING DATE: 2003-03-04
NUMBER OF EEQ ID NOS: 90
SEQ ID NO 48
LENGHIH 30

TUPOR: DATE
TURNE PATENTIN VERSION 3.2
SEQ ID NO 48
LENGHIH 30
TUPOR: DATE
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1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
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; ORGANISM: Artificial sequence
; EPATURE:
; OTHER INFORMATION: glucagon-like peptide-1
PCT-US03-26818-48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
TITLE OF INVENTION: Modified GLP-1 Receptor Agonists and Their Pharmacological
TITLE OF INVENTION: Modified GLP-1 Receptor Agonists and Their Pharmacological
TITLE OF INVENTION: Methods of Gse
TITLE OF INVENTION: Moder: 12010-05-04
CURRENT APPLICATION NUMBER: 12010-09-04
CURRENT FILING DATE: 2003-09-04
PRIOR FILING DATE: 2003-09-04
PRIOR FILING DATE: 2003-09-06
NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin version 3.2
SEQ ID NO 28
LENGTH: 32
TENGTH: 32
TENGTH: 32
CRAMISM: Momo Sapiens
US-10-656-465-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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PCT-US03-26778-14
Sequence 14, Application PC/TUS0326778
Sequence 14, Application PC/TUS0326778
Sequence 14, Application
APPLICANT: RADGATION:
APPLICANT: SADGATI, Homayoun
APPLICANT: TYBNER, Andrew J.
TILLS OF INVENTION: ORAL DELIVERY OF MODIFIED TRANSFERRIN FUSION PROTEINS
FILE REPERENCE: S4710-506-W0
CURRENT APPLICATION NUMBER: PCT/US03/26778
CURRENT FILING DATE: 2003-08-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
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Sequence 122, Application US/10291226

SEXERAL WRORMATION:

APPLICANT: Larsen, Biarne Une

APPLICANT: Makelsen, Jens Mollgaard

CURRENT FILKEN DATE: 5521(45487)

CURRENT APPLICANTON WUMBER: US/09/614,847

PRIOR FILING DATE: 12000-07-12

PRIOR FILING DATE: 12000-07-13

WUMBER OF SEQ ID NOS: 153

SOFTWARE PARED RECEIL VOR. 2.1

SENCIP NO 122

LENGTH: 37
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 97.5%; Score 157; DB 6; Length 32; Best Local Similarity 96.8%; Pred. No. 1.1e-14; Matches 30; Conservative 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
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0;
                                                                                                                                  0; Gaps
                                                                                                           PRIOR FILING DATE: 2002-09-16
PRIOR APPLICATION NUMBER: US 60/439,369
PRIOR FILING DATE: 2003-01-09
NUMBER OF SEQ ID NOS: 34
SOSTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 30
TIPE: PRT
CRASHISM: Homo sapiens
PCT-US03-28093-1
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Search completed: October 15, 2003, 11:07:58 Job time : 16.2459 secs

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REGULT 1
October 15, 2003, 10:49:12 ; Search time 25:4098 Seconds (without alignments) 117.326 Million cell updates/sec
                                                                                                                                         283308
     GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                         US-09-719-410-3
161
1 HAEGIFISDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                           283308 segs, 96168682 residues
                                  OM protein - protein search, using sw model
                                                                                                      BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                            Title:
Perfect score:
Sequence:
                                                                                                       Scoring table:
                                                                                                                            Searched:
                                                Run on:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

pir_76:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Database :

SUMMARIES

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	precursor	glucagon precursor	proglucagon - chic	glucagon precursor	glucagon-like pept	glucagon-like pept	2 precurs	chinook	precurs	precursor	precursor	precursor	II precur	like pept	precursor	 marbled 	- Nort	precurs	smaller	- Nort	elephan	North A						
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Des	glu	112	glu	glu	glu	glu	gJu	glu	pro	glu	glu	glu	gja	gra	glu	glu	gra	gra	gjn	glu	glu	glu	gIn	gJn	gJn	grn	gra	910
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ឧ	GCPG	GCGP	GCRTDU	GCRT	GCHY	GCBO	A57294	9	151301	GCFGB	B61	C61	GCAF2	151	151	GCIDC	GCGXA	GCONC	151057	S44473	GCFIS	S07	844	GCAF	GCDF	S44	GCEN	GCOPY
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% Query Match Length DB	158	180	180	180	180	180	180	151	206	101	30	30	122	99	178	63	72	9	178	30	87	29	31	124	53	31	29	. 29
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% Query Match	100.0	100.0	100	100.0	100	100.0	100.0	92.5	92.5	80	78	78	78	73	73	72.	72.	70	70.2	68.8	64.0	9	53	59	50	58	57	53
Score	161	161	191	161	161	161	161	149	149	129	126	126	126	118	118	117	116	113	113	111	103	97	96	96	95	94	93	06
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us-09-719-410-3.rpr

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GCGP

GLOGA

GLOGA

A.Alternate names: oxynchamodulin

N.Fontains: glicentin-related peptide; glucagon; glucagon-37 (oxyntomodulin); glucagon;

N.Alternate names: oxynchamodulin

N.Fontains: glicentin-related peptide; glucagon; glucagon-37 (oxyntomodulin); glucagon;

C.Species: Cavia porcellus (guinea pig)

C.Species: Oxedesion: A.44856, A.23449; A63549; A.23449; A.23449; A.314040; S.J. Steiner, D.F.

N.Seino, S.J. Welsh, M.; Bell, G.I.; Chan, S.J.; Steiner, D.F.

N.Seino, S.J. Welsh, M.; Bell, G.I.; Chan, S.J.; Steiner, D.F.

N.Reference number: A.24856, MUD:86248118; PMID:3755107

A.Accession: A.4856

A.Molecule type: nRNA

A.Molecule type: nRNA

A.Molecule type: nRNA

A.Molecule type: Drough of SEL2, 1986

A.Molecule type: Protein

A.Molecule typ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A Modecule type: Protein
A, Residues: 53-81 < CONN
A, Note: glucagon-17 was not completely sequenced
C, Superfamily: glucagon
C, Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; par
C, Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; par
C, Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; proglucagon *status predicted < SIG>
F) 1-180/Product: proglucagon *status predicted < Profession Glicantin-related peptide * status predicted
F) 53-81/Product: glucagon *status experimental < GCN>
F) 21-27/Product: glucagon-like peptide 1 *status predicted < GLID>
F) 146-178/Product: glucagon-like peptide 2 *status predicted < GLID>
F) 146-178/Product: glucagon-like peptide 2 *status predicted < GLID>
F) 146-178/Product: glucagon-like peptide 2 *status predicted < GLID>
F) 151-7/Modified site: amidated carboxyl end (Arg) (amide in mature form from following
C; Superfamily: glucagon
C; Superfamily: glucagon
C; Styperfamily: glucagon
C; Stypords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; ini
F; 1-20/Domain: signal sequence fatatus predicted <SIG>
F; 1-180/Product: proglucagon fstatus experimental <PGC>
F; 1-180/Product: glicentin fstatus experimental <GGN>
F; 2-180/Product: glicentin fstatus experimental <GGN>
F; 2-180/Product: glucagon fstatus experimental <GCN>
F; 3-180/Product: major proglucagon fragment fstatus experimental <MCN>
F; 3-178/Product: major proglucagon fragment fstatus experimental <MCN>
F; 9-178/Product: fruncated glucagon-like peptide l fstatus experimental <GLN>
F; 98-127/Product: glucagon-like peptide 2 fstatus predicted <GLN>
F; 98-127/Product: glucagon-like peptide 2 fstatus predicted <GLN>
F; 98-127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 161; DB 1; Length 180; Best Local Similarity 100.0%; Pred. No. 1.5e-15; Matches 31; Conservative 0; Mismatches 0; Indels
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GLUCACIANS: Glicentin: Glicentin-related polypeptide (GRPP); glucagon; glucagon-like peg

Ry Contains: glicentin: glicentin-related polypeptide (GRPP); glucagon; glucagon-like peg

Ry Experited 1 (ELELE)

C. Species: Romo saplens (man)

C. Saccession: A4437; A44197; A3075; A32614; A01541; S23309

Ry Mile: Artucture of the human glucagon gene.

A. Ritle: Structure of the human glucagon gene.

A. Rocession: A24377

A. Rocession: A24137

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Residues: 53-81 CTRO>
Remo, M.; Iwadate, H.
TSugita, A.; Takanoto, K.; Kamo, M.; Iwadate, H.
Dr. J. Biochem. 206, 691-696, 1992
R. J. Biochem. 206, 691-696, 1992
R.Title: C-terminal sequencing of protein. A novel partial acid hydrolysis and analysis
Reference number: $23108; MUID:92298996; PMID:1606956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A.Molecule type: protein
A.Mesidues: 53-81 <TSU>
C.Comment: In pancreatic alpha-cells, proglucagon is processed to glicentin-related poly
stinal L cells, proglucagon is processed to truncated glucagon-like peptide 1, glucagon-
            F;126-158/Product: glucagon-like peptide 2 #status experimental <GL2>
F;107/Modified site: amidated carboxyl end (Arg) (amide in mature form from following gl
                                                                                                                                                                                                                                                                                     ó
                                                                                                                                                                   Query Match 100.0%; Score 161; DB 1; Length 158; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps
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.;Rosidues: 98-127 < 0765.
.;Thomsen, J.; Kristiansen, K.; Brunfeldt, K.; Sundby, F.
Tybonsen, J.; 135-319, 1972
.;Title: The amino acid sequence of human glucagon.
                                                                                                                                                                                                                                                                                                                                                                                      A;Gene: GDB:GCG
A;Cross-references: GDB:119265; OMIM:138030
A;Map position: 2436-2437
A;Introns: 31/2; 65/2; 131/2; 179/2
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A Molecule type: mkWA
B Molecule type: mkWA

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N;Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-]
C;Species: Mesoricetus auratus (golden hamster)
C;Species: Mesoricetus auratus (golden hamster)
C;Accession: A01539
R;Bell, G.1.; Santerre, R.F.; Mullenbach, G.T.
Nature 302, 715-718, 1583
A;Title: Hamster preproglucagon contains the sequence of glucagon and two related peatitie: Hamster preproglucagon contains the sequence of glucagon and two related peatities: Apreciaence number: A01539; MUID:83167563; PMID:6835407
F:21-180/Froduct: proglucagon #status predicted <PGC>
F:21-50/Region: glicentin-related peptide #status predicted
F:25-81/Product: glucagon #status predicted <GGN>
F:38-127/Product: glucagon-like peptide 1 #status predicted <GLL>
F:46-180/Product: glucagon-like peptide 2 #status predicted <GLL>
F:146-180/Product: glucagon-like peptide 2 #status predicted <GLL>
F:127/Modified site: amidated carboxyl end (Arg) (amide in mature form from followlr
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                                                                                                                                                                                                                                                                                                                                                                             Length 180;
                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 161; DB 1; Length 18 Best Local Similarity 100.0%; Pred. No. 1.5e-15; Matches 31; Conservative 0; Mismatches 0; Indels
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A; Residues: 53-81 <BRO>
C; Superfamily: glucagon
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GCBO
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                                                                                                                                                         Jucagon precursor - degu

Jucagon precursor - degu

N.Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-like
C.Spaces: octodon degus (degu)
C.Spacession: C36118
C.Spacession: C36118
R.Nishi, M.; Steiner, D.F.
Mol. Endocrinol. 4, 1192-1198, 1950
A.Filte: cloning of complementary DNAs encoding islet amyloid polypeptide, insulin, and A.Facession: C36118
A.Aocession: C36118
A.Aocession: C36118
A.Aocession: C36118
A.Robecule type: mRNA
A.Robecule type: m
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A.Residues: 1-180 <a href="https://doi.org/10.18.0/">https://doi.org/10.18.0/</a>
A.Residues: 1-180 <a href="https://doi.org/10.18.0/">https://doi.org/10.18.0/</a>
A.Roross references: EMBL:K02809
A.Mote: the authors translated the codon TTG for residue 10 as Glu and ACC for residue 5
B.Mojsov, S.; Hethrida, G.; Wilson, I.B.; Ravazzola, M.; Orci, L.; Habener, J.F.
J. Biol. Chem. 261, 11880-11889 1986
A.Title: Preproglucagon gene expression in panoreas and intestine diversifies at the lew A.Recession: A25190; MUID:86304324; PMID:3528148
A.Rocession: A25190; MUID:86304324; PMID:3528148
A.Residues: not compared with conceptual translation
A.Molecule type: MRNA
A.Residues: 1-180 AMD>
R.Heinich, G.; Gros, P.; Lund, P.K.; Bentley, R.C.; Habener, J.F.
Endocrinology 115, 2176-2181, 1984
A.Title: Pre-proglucagon messenger ribonucleic acid: hucleotide and encoded amino acid s. A.Recession: A4198; MUID:85051023; PMID:6548696
A.Recession: A44198; MUID:85051023; PMID:6548696
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C;Superfamily: glucagon
C;Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; panore
F;1-20/Domain: signal sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        glucagon precursor - rat
NiContains; glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-like
NiContains; glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-like
NiContains; Glucation orrvegicus (Norway rat)
C;Date: 30-Sep-1987 #sequence_revision 30-Sep-1987 #text_change 26-Feb-1999
C;Accession: A2555; A25109; A44198
R;Heinrich; G; Gros, P.: Eabener, J.F.
J. Biol. Chem. 259, 14082-14087, 1984
J. Biol. Chem. 259, 14082-14087, 1984
A;Ritel Glucagon gene sequence: four of six exons encode separate functional domains of A;Reference number: A22655; MUID: 85054883; PMID: 6094539
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A,Moleoule Type: mRNA
A,Residues: 1-180 < CES.
A,Cross-references: GB:K02809; GB:K02810; GB:K02811; GB:K02812
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Page

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Glucagon precursor - bullfrog (fragments)
NiAlternate names: oxyntomodulin
NiContains: glucagon.36 (oxyntomodulin); glucagon-like peptide 1; glucagon.
Cipperies: Rama catesbelana (bullfrog)
Cipperies: Rama catesbelana (bullfrog)
Cipperies: Rama-1993 *sequence_tevision 31-War-1993 *text_change 20-War-1998
Cipcession: B28091; C28091; D28091
R;Pollock, H.G.; Hamilton, J.W.; Rouse, J.B.; Bbner, K.E.; Rawitch, A.B.
J. Balol. Chem. 263, 9746-9751, 1988
A:Title: Isolation of peptide hormones from the pancreas of the bullfrog (Rana cates)
A:Reference number: A92730; MUID:88257102; PMID:3260236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: GB:S78477; NID:g999386; PIDN:AAB34506.1; PID:g999387 C;Superfamily: glucagon C;Reywords: duplication
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Superfamily: glucagon
C;Reywords: carbohydrate metabolism; duplication; hormone; pancreas
F;1-36/Product: glucagon-36 (cyrndrodulin) *status experimental <G36>
F;1-29/Product: glucagon *status predicted <GGNb
F;37-67/Product: glucagon-like peptide 1 *status experimental <GL1>
F;69-101/Product: glucagon-like peptide 2 *status experimental <GL1>
                                                                                                                                                                                                                                                                                                                                                                                             Query Match 92.5%; Score 149; DB 1; Length 151; Best Local Similarity 87.1%; Pred. No. 6.3e-14; Matches 27; Conservative 3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 92.5%; Score 149; DB 2; Length 206; Best Local Similarity 87.1%; Pred. No. 8.8e-14; Matches 27; Conservative 3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
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A. Molecule type: protein
A. Moscalule type: protein
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A. Accession: D28091
A. Molecule type: protein
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151301
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C; Keywords: amidated carboxyl end, carbohydrate metabolism; duplication; hormone; panore F;1-20/Domain: signal sequence fstatus predicted <SIG> F;21-180/Product: proglucagon #status predicted <SIG> F;21-50/Region: gi.centin-related peptide #status predicted F:55-81/Product: glucagon #status experimental <GN> F;31-50/Redion: glucagon-like peptide 1 #status experimental <GN> F;18-178/Product: glucagon-like peptide 1 #status predicted <GLD> F;18-178/Product: glucagon-like peptide 1 #status predicted <GLD> F;127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following gl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            glucagon precursor - mouse
C; Speciaes: Mus musculus (louse mouse)
C; Date: 01-Dec.1995 * agequence_revision 01-Dec.1995 * text_change 16-Jul-1999.
C; Accession: A57294; S49903
E; Rothenberg, M.E; Eillertson, C.D.; Klein, K.; Zhou, Y.; Lindberg, I.; McDonald, J.K.;
Biol. Chem. 270, 10136-10246, 1995
A; Title: Processing of mouse proglucagon by recombinant prohormone convertase 1 and immu A; Recession: A57294; MUID:95247722; PMID:7730317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          glucagon precursor - chicken N; Contains: glucagon-like peptide 1 (Species: Gallus gallus (chicken) (Species: Gallus gallus (chicken) (Species: Gallus gallus (chicken) (Species: 31-per-1991 (species
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
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A; McSeidues; 1-151 GRNA
A; Rocesidues; 1-151 GRNA
A; Rocesidues; 1-151 GRNA
A; Rocesidues; 1-151 GRNA
A; Rocesidues; 1-151 GRNA
A; Robilook, H.G.; Kimmel, J.R.
J. Bloi. Chem. 260, 9377-9380, 1975
A; Title: Chicken glucagon. Isolation and amino acid sequence studies.
A; Reference number: A92189; MUD: 76068271; PMID:1194290
A; Rocession: A92189
A; Rolecule type: protein
A; Residues: 55-83 GPD.
R; Rhangy J; Ray GPD.
R; Rhangy J; Ray GPD.
R; Rhangy J; Ray GPD.
A; Reference number: A60836; MUD: 88113418; PMID: 2828209
A; Accession: A60836
A; Molecule type: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A) Status: preliminary
A) Molecule type: mRNA
A) Molecule type: mRNA
A) Mesiduse; 1.180 (*ROYA)
A) Cross-references: RMSL:246845; NID:9599880; PIDN:CAA86902.1; PID:9599881
C; Superfamily: glucegon
C; Keywords: carbohydrate metabolism; duplication; hormone; pancreas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 161; DB 2; Length 180; Best Local Similarity 100.0%; Pred. No. 1.5e-15; Matches 31; Conservative 0; Mismatches 0; Indels
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3; Indels

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Glucagon - chinook salmon (fragment)
Clopecies: Oncorhynohus tscharytscha (chinook salmon)
Clopecies: Oncorhynohus tscharytscha (chinook salmon)
Clote: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
Clote: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 151093
Rithaib. Dah.; Wong. J. 1995
Altile: Trout and chicken proglucagon: alternative splicing generates mRNA transcriates: Trout and chicken proglucagon: alternative splicing generates mRNA transcriates preliminary; translated from GB/EMBL/DDBJ
Altile: Trout and chicken proglucagon: alternative splicing generates mRNA transcriated from GB/EMBL/DDBJ
Altile: Trout and chicken proglucagon: alternative splicing generates mRNA transcriated from GB/EMBL/DDBJ
Altile: Trout and chicken proglucagon GS/Superfamily: glucagon
Closuperfamily: glucagon
Closuperfamily: glucagon
Closuperfamily: glucagon
78.3%; Score 126; DB 1; Length 122; 71.0%; Pred. No. 1e-10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 73.3%; Score 118; DB 2; Length 66
Best Local Similarity 66.7%; Pred. No. 7.2e-10;
Matches 20; Conservative 7; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 HAEGTFISDVSSYLEGGAAKEFLAMLVKGRG 31
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Best Local Similarity 71.0°
Matches 22; Conservative
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                                                                                                                                                                                                                                                                         RESULT 12
B61125
glucagon-like peptide - American eel
C;Species: Anguilla rostrata (American eel
C;Species: Anguilla rostrata (American eel)
C;Decies: Anguilla rostrata (American eel)
C;Decies: Anguilla rostrata (American eel)
C;Decession: B61125
R;Conlon, J.M.; Andrews, P.C.; Thim, L.; Moon, T.W.
Gen. Comp. Endocrinol. 82, 23-32, 1991
A;Itle: The primary structure of glucagon-like peptide but not insulin has been conserved, Reference number: A61125; MUD:91340068; PMID:1874385
A;Accession: B61125
A;Molecule type: Protein
A;Residues: 1-30 CCON>
C;Superfamilly: glucagon
C;Superfamilly: glucagon
C;Superfamilly: glucagon-like peptide **status experimental CGIP>
F;30/Modified site: amidated carboxyl end (Arg) **status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gloragon 2 precursor - American goosefish
N;Contains: glucagon-like peptide 1
N;Contains: glucagon-like peptide 1
C;Species: Lophius americanus (American goosefish)
C;Date: 31:Mar-1993 #sequence_revision 31-Mar-1993 #text_change 21-Jul-2000
C;Accession: AD5150
R;Lund, P.K.; Goodman, R.H.; Montminy, M.R.; Dee, P.C.; Habener, J.F.
J. Biol. Chem. 258, 3380-3284, 1983
A;Title: Anglerfish islet pre-proglucagon II. Nucleotide and corresponding amino acid se
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Collication like peptide - European eel
Glogoseise: Anguilla anguilla (European eel)
Clogosise: Anguilla anguilla (European eel)
Clogosise: Incharl194 #sequence_revision 10-Mar-1994 #text_change 21-Nov-1997
Clogosision: C66125
Floate: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_change 21-Nov-1997
Clogosision: C66125
All Andrews, P. C.; Thinh, L.; Moon, T.W.
Gen. Comp. Endocrinol. 82, 23-32, 1991
A) Fitte: The primary structure of glucagon-like peptide but not insulin has been conservable centering protein
A) Accession: C66125
A) Accession: C66125
A) Accession: C66125
A) Accession: C66125
C) Superfamily: glucagon
C) Superfamily: glucagon
C) Superfamily: glucagon-like peptide #status experimental
F):30/Modified site: amidated carboxyl end (Arg) #status experimental
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                                                                          Gaps
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          Query Match 80.1%; Score 129; DB 1; Length 101; Best Local Similarity 76.7%; Pred. No. 3e-11; Matches 23; Conservative 5; Mismatches 2; Indels
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GCAF2
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Length 66;

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heloderma s
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Nature 257:751-757(1975).
--- FUNCTION: GLUCAGON PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND
RAISES THE BLOOD SUGAR LEVEL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23.00.1986 (Rel. 01, Created)
01.NOV-1990 (Rel. 16, Last sequence update)
28-FZB-2003 (Rel. 41, Last annotation update)
Glucagon precursor [Contains: Glicentin; Glicentin-related polypeptide (GRPP); Glucagon; Glucagon-like peptide 1 (GLP1); Glucagon-like peptide 2 (GLP2)] (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 111-158.
MEDLINE-88243712; PubMed=3379036;
Buhl T., Tahn L., Kofod H., Orskov C., Harling H., Holst J.J.;
Maturally occurring products of proglucagon 111-160 in the porcine and human small intestine.',
J. Biol. Chem. 263:8621-8624(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      **RRY CRYSTALLOGRAPHY (3.0 ANGSTROMS),

BENELME-FG651297; Pubmed-#71382;

Sasaki K., Dockerill S., Ademiak D.A., Tickle I.J., Blundell T.L.;

"X.ray analysis of glucagon and its relationship to receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 33-61.

Bromer W.W., Sinn L.G., Behrens O.K.;
The amino acid sequence of glucagon. V. Location of amide groups, acid degradation studies and summary of sequential evidence.";
J. Am. Chem. Soc. 79:2807-2810(1957).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE OF 78-107.
MEDLINE-89327238; Pubwed-2753890;
Orskov C., Bersani M., Johnsen A.H., Hosjrup P., Holst J.J.;
Complete sequences of glucagon-like peptide-1 from human and pig small intestine.";
J. Biol. Chem. 264:12826-12829(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sus scrofa (Pig).
Sustaryota, Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Sulna; Suidae; Sus.
NCBL_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REPURED TO 1-69.

MEDLINE-81248172; Pubmed=6894800;

MATCH primary scructure of porcine glicentin (proglucagon).";

The primary scructure of porcine glicentin (proglucagon).";

Regul. Pept. 2:139-126(1981).

PSOURNCE OF 1-69.

MEDLINE-82221776; Pubmed=7045833;

The amino acid sequence of porcine glicentin.";

Peptides 2 Suppl. 2:37-39(1981).
                          P25649 P23062 P23062 P23062 P20394 P23328 P23328 P03482 P09682 P09682 P09688 P09681 P09681 P09681 P09681 P09681 P09681 P09681 P09681 P09681 P0
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CLOC_PIG
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gallus gallu
sallus gallu
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gallus gallu
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gallus ann
recopn sus
renopus lae
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myoxocephal
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                       GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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161
1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                        127863 seqs, 47026705 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                     OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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13-AUG-1987 (Rel. 05, Last sequence update)
28-FEE-2003 (Rel. 41, Last annotation update)
Glucagon precursor [Contains: Glicentin-related polypeptide (GRPP);
Glucagon-37 (Oxymtomodulin); Glucagon-17ke peptide 1 (GLP1);
Glucagon-1ike peptide 2 (GLP2)].
RAISES THE BLOOD SUGAR LEVEL.

-!- FUNCTION: GLP2 STIMULATES INTESTINAL GROWTH AND UPREGULATES VILLUS HEIGHT IN THE SMALL INTESTINAL ONCOMPANT WITH INCREASED CRYPT CELL, PROLIFERALTON AND DEPREASED ENTERCOUTE APOPTOSIS.

-!- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

-!- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PDB1, XX0107; AAA30538.1; -.
PDB1, IXX6, 13-2rEB-02.
InterPro, IPR000552; Glucagon.
Pfam: PF00123; hormone2; 3.
PRINTS; PR00125; GLUCAGON.
SMART; SM00070; GLUCAGON.
PROSTER; PS00260; GLUCAGON; 4.
GLUCAGON GLUCAGON; 4.
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MEDILINE-8624818; PubMed-3755107;
Stato S., Walsh M., Bell G.I., Chan S.J., Steiner D.F.,
"Mutation Sin the guinea pig preproglucagon gene are restricted to a specific portion of the probormone sequence.",
FRBS Lett. 203:125-30(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cavia porcellus (Guinea pig).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammaila; Butheria; Rodentla; Bystricognathi; Caviidae; Cavia.
NCBI_TaxID~10141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 53-81.
MEDLINE-86165412; PubMed-3956884;
Huang C.G., Eng J., Pan Y.-C.E., Hulmes J.D., Yalow R.S.;
"Gulnea pig glucagon differs from other mammalian glucagons.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GLICENTIN-RELATED POLYPEPTIDE GLUCAGON.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT; 180 AA.
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D7 C10C_CN

D7 13-NUG-

D7 28-PEB-

D8 G10-S90

D8 G10-S90

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MEDIALNE-7116645. PubMed-6631957;
Braun W., Wider G., Lae K.H., Wuthrich K.;
Conformation of glucagon in a lipid-water interphase by lH nuclear magnetic resonance.",
J. Mol. Biol. 169:921-948(1983).
-:- FUNCTION: GLUCAGON PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND
-!- FUNCTION: GLP2 STIMULATES INTESTINAL GROWTH AND UPREGULATES VILLUS HEIGHT IN THE SMALL INTESTINE, CONCOMPITANT WITH INCREASED CREPT CELL PROLIFERATION AND DECREASED ENTERCOTIE APOPTOSIS.
-!- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLERS OF LANGERHANS IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.
-!- MISCELLANDOUS: X'S IN THE SEQUENCE WERE INCLUDED BY HOMOLOGY WITH HUMAN SEQUENCE.
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MEDIANE-83299996; PubMed-6577439;
Lopez L.C., Frazier M.L., Su C.-J., Kumar A., Saunders G.F.;
"Mammalian pancreatic preproglucagon contains three glucagon-related peptides."
Proc. Natl. Acad. Sci. U.S.A, 80:5485-5489(1983).
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13-A0G-1987 (Rel. 05, Last sequence update)
13-RB-2003 (Rel. 41, Last annotation update)
Glucagon precursor [Contains: Glicentin-related polypeptide (GRPP);
Glucagon; Glucagon-1ike peptide 1 (GLP1); Glucagon-like peptide 2
(GLP2)].
                                                                                                                                                                                                                       normal backback.

- i- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.

PDB; 1GCN; 30-SEP-83.

R InterPor; 1FR000532; Glucagon.

Pfam; PF00123; hormone3.

R SMART; SK00070; GLUCA.3.

R PROSITE; SK00260; GLUCA.3.

R PROSITE; SK00260; GLUCA.3.

R PROSITE; PRO0260; GLUCA.3.

R PROSITE; PRO0260; GLUCA.3.

R GLUCAGON family; Hormone, Cleavage on pair of basic residues; M 3D-structure.

T NOW_TER 1 1 69 GLUCANTIN.

R PEPTIDE 1 30 GLICANTIN.

T PEPTIDE 1 30 GLUCAGON.-LIKE PEPTIDE.

T PEPTIDE 1 50 GLUCAGON-LIKE PEPTIDE 1.

T PEPTIDE 1 50 GLUCAGON-LIKE PEPTIDE 2.
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
Bovidae; Bovinae; Bos.
NCBL_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 161; DB 1; Length 158; 100.0%; Pred. No. 1.1e-15; cive 0; Mismatches 0; Indels
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59 GLICENTIN.
50 GLICCROTIN.
107 GLICCRON-LIKE PEPTIDE 1.
158 GLICCRON-LIKE PEPTIDE 2.
42 GLICCRON-LIKE PEPTIDE 2.
55 57
8, 18212 MW; 28C6FCF257F333B2 CRC64;
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MEDLINE=71166445; PubMed=5102927;
Bronner W.W., Boucher M.E., Koffenberger J.E. Jr.;
"Amino acid sequence of bovine glucagon.";
J. Biol. Chem. 246:2822-2827(1971).
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Best Local Similarity 100.
Matches 31; Conservative
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78 1
126 1
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158 AA;
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P01272;
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GLUC_BOVIN

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DY 28-FEB-

C GLUCAGG

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RP 77 PART CRYSTALLOGRAPHY (3.0 ANGSTROMS) OF 53-81.

RY ATRY CRYSTALLOGRAPHY (3.0 ANGSTROMS) OF 53-81.

RY ALTH M.S., Lin Y. Lin Y. Burley S.R., Krstenansky J.L., Ahn J.M.,

RA Aziesh B.Y., Trivedi D., Huby V.J.;

"Structure-function studies on positions 17, 18 and 21 replacement

RT analogues of glucagon: the importance of charged residues and salt

Bridges in glucagon: the importance of charged residues and salt

RT Didges in glucagon: the importance of charged residues and salt

RT Didges in glucagon bological activity.";

RAISES THE BLOOD SUGAR LEVEL.

C. - FUNCTION: GLD2 STINGLARES INTESTINAL GROWTH AND UPPREGUATES VILLUS

HEIRES THE BLOOD SUGAR LEVEL.

C. - FUNCTION: GLD2 STINGLARES INTESTINAL GROWTH AND UPPREGUATES VILLUS

HEIRES THE BLOOD SUGAR LEVEL.

C. - PROMOTION: PROJUCED IN THE SACIES OF THE ISLESS OF LANGERHANS

IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

C. - PRARMACEUTICAL: Available under the names Glucagon (Eli Lilly) and

Glucagen or Glucagon Novo Nordisk (Novo Nordisk). Used to treat

severe hypoglycemia in insulin' dependent diabetics.

C. - PARMARS: NAMB-Glucagon at Eli Lilly;

C. - PATABASE: NAMB-Glucagon at Eli Lilly;

C. - PATABASE: NAMB-Glucagon at Eli Lilly;

C. - NOTS-Clinical information on Eli Lilly glucagon products;

C. - NOTS-Clinical information on Eli Lilly glucagon products.
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RA FLESCHIS TO PLOMED = 12477932;

RA FLESCHIS F. Pelhoded = 12477932;

RA FLESCHIS F. Pelhoded E.A., Grouse I.H., Derge J.G.,

STRAUSPER R.D., Collins E.S., Magner L., Shemmen C.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Blactow K.M., Schaefer C.F., Bath N.K.,

Blockins R.F., Jordan H., Woore T., Max S. I., Mang J., Hsich F.,

Blockins R.F., Jordan H., Woore T., Max S. I., Wang J., Hsich F.,

Blockins R.F., Jordan H., Bondaldo M.F., Casawatt T.L., Scheefer T.E.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carminci P., Frange C.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carminci P., Frange C.,

Brownstein M.J., Worley W.B., Poters G.J., Abramson R.D., Mullahy S.J.,

RAJA S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RAJA S.S., McWan P.J., Wokernan K.J., Malek J.A., Gunarane P.H.,

RAJA S.S., Worley K.J., Sodergren B.J., Lux., Gibbs R.A.,

RAJA S. Worley W., Tooudran M., Madan A.N., Garos B.D., Dakkson M.C.,

RA Blakesley R.W., Tooudnan J.W., Green B.D., Dakkson M.C.,

RA Blakesley R.W., Tooudnan J.W., Green B.D., Dakkson M.C.,

RA Schnerch A., Schein J.E., Vones S.J.M., Marra M.A.,

R. Generation and initial analysis of more than 15,000 full-length

RT Mann and mouse cDNA sequences. ",

P. Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                 TISSUB-Liver;
MEDLINE-83271477; PubMed-6877358;
Bell G.I., Sancher-Pescador R., Laybourn P.J., Najarian R.C.;
Exon duplication and divergence in the human preproglucagon gene.";
Nature 304:368-371(1983).
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MEDLINE-89327238; PubMed-2753890;
MEDLINE-89327238; PubMed-2753890;
MEDLINE-89327238; PubMed-2753890;
"Complete sequences of glucagon-like peptide-1 from human and pig small intestine.";
J. Biol. Chem. 264:12826-12829(1989).
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Thomsen J., Kristiansen K., Brunfeldt K., Sundby F.,
"The amino acid sequence of human glucagon.";
The Same Lett. 21:315-319(1972).
SEGUENCE FROM N.A. DEMEG=3725587; MEDIUM:=86259053; PubMed=3725587; White J.W., Saunders G.F.; "Structure of the human glucagon gene."; Nucleic Acids Res. 14:4719-4730(1986).
                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C this SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation—the European Bioinformatics and the EMBL outstation—the European Bioinformatics Institute. There are no rectrictions on its use by non-profit institutions as long as its content is in no way complied and this statement is not removed, usage by and for commercial or send an email to license agreement (See http://www.isb-sib.ch/announce/cornection email to license@isb-sib.ch).

EMBL; DO0014; BAA0010.1; ...

EMBL; DO0014; BAA0010.1; ...

EMBL; DO0014; BAA0010.1; ...

EMBL; DO0014; BAA0010.1; ...

EMBL; DO0014; BAA00010.1; ...

EMBL; DO0014; BAA00016.1; ...

EMBL; DO0014; BAA0016.1; ...

EMBL; DO0016.1; ...
                                                                 RAISES THE BLOOD SUGAR LEVEL.

-!- FUNCATION: GLEP STIMULATES INTESTIBAL GROWTH AND UPREGULATES VILLUS
HELGHT IN THE SMALL INTESTINE, CONCONTRANT WITH HUCKBASED CRYPT
GELL PROLIFERATION AND DECREASED ENTEROCITE APOPTOSIS.

-!- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS
IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

-!- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
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POLIC_BOMAN
POLITS;
21-JUL-1986 (Rel. 01, Created)
13-AGG-1987 (Rel. 05, Last sequence update)
15-KBP-2003 (Rel. 42, Last annotation update)
Glucagon precursor [Contains: Glicentin-related polypeptide (GRPP);
Glucagon; Glucagon-like peptide I (GLPI); Glucagon-like peptide 2
(GLP2)].
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Sukaryota, Metazoa, Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
NCBL_PaxID=9606;
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MEDLINE-88330860; PubMed=2901414;
Drucker D.J., Asa S.;
Glucagon gene expression in vertebrate brain.";
J. Biol. Chem. 263:13475-13478(1988).
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RE REVISIONS TO 12-15.

RUDMILTED (I.Y. XXX-1985) to the EMBL/GenHank/DDBJ databases.

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IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

-1 SIMILARITY: BELONGS TO THE GLACAGON FRANILY.

-1 SIMILARITY: BELONGS TO THE GLACAGON FRANILY.

-2 SIMILARITY: BELONGS TO THE GLACAGON FRANILY.

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-4 SINGER TO CHARLY SELVENT OF THE GLACAGON FRANILY.

-4 SINGER TO CHARLY SELVENT OF THE GLACAGON FRANILY.

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TISSUE-Fanoreatic islets;
MEDLINE-9524772; PubMed-7730317;
Nchenberg W.E., Filertson C.D., Klein K., Zhou Y., Linberg I.,
McDonald J.K., Mackin R.B., Noe B.D.;
"Processing of mouse proglucagon by recombinant prohormone convertase J and immunopurifised prohormone convertase J. and immunopurifised prohormone convertase J. Biol. Chem. 270:10136-10146(1995).
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01-0CT-1996 (Rel. 34, Last sequence update)
28-FRB-2003 (Rel. 41, Last annotation update)
26-Glucagon precursor [Contains: Glicentin-related polypeptide (GRPP);
Glucagon; Glucagon-like peptide 1 (GLP1); Glucagon-like peptide 2
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Eukaryota, Metazoa, Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBL_TAXID-10090;
                                    "Hamster preproglucagon contains the sequence of glucagon and two related peptides.";
Nature 302:716-718(1983).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
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AC P5505;
DT 01-0CT-1996 (
DT 28-FEB-2003 (
DF 01-0CT-1996 (
DF 01-0CT
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DR REEL: 004040; AAA57557.1; -.

DR REEL: V015392; CAA27627.1; -.

DR REEL: V015392; CAA27627.1; -.

DR REEL: V015392; CAA27627.1; -.

DR PER: A2477; CAA24759.1; -.

DR PER: A2477; CACUTO.

DR PER: 1B-NOV-98.

DR OBS: 1BHO; 18-NOV-98.

DR Genew: 1BHO; 18-NOV-98.

DR MIM; 138030; --

DR MIM; 138030; --

DR MIM; 138030; --

DR OG: 00000523; P::eal; profein coupled fraction; TAS.

DR OG: 000007385; P::eal; protein coupled receptor protein signalin...; TAS.

DR OG: 00007185; P::ginal transduction; TAS.

DR OG: 00007186; P::ginal transducti
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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01-FEB-1996 (Rel. 33, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Glucagon precursor [Contains: Glicentin-related polypeptide (GRPP); Glucagon; Glucagon-like peptide 1 (GLP1); Glucagon-like peptide 2 GGG.
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Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
Mesocricetus.
NCBI_TaxID=10036;
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100.0%; Score 161; DB 1; Length 180;
Best Local Similarity 100.0%; Pred. No. 1.3e-15;
Matches 31; Conservative 0; Mismatches 0; Indels
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59 62 8 77 78 79
180 AA, 20909 MW; 7A99BEC629B2862C CRC64;
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A -> V (IN dbSNP:5650),
/FTId-VAR_014596.
K -> N (IN REF. 3).
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SEQUENCE FROM N.A.
MEDLINE-83167563; PubMed-6835407;
Bell G.I., Santerre R.F., Mullenbach G.T.;
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DF 01-FDH

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SEQUENCE FROM N.A.
MEDLINE-85051023; PubMed-6548696;
Heinrich G., Gros P., Lund P.K., Bentley R.C., Habener J.F.;
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** (2)
** SEQUENCE FROM N.A.

** SEQUENCE FROM N.A.

** Shameadin R., Knepel M.;

** Shameadin R., Knepel M.;

** Mouse glucagon full length cDNA.";

** Mouse glucagon full length cDNA.";

** RAJEST GLUN-2000) to the EMEL/GenBank/DDBJ databases.

** CONTON: GLUCAGON PROMOTES HYDEOLYSIS OF GLYCOGEN AND LIPIDS, AND RAJEST THAT GROWTH AND UPPEGGLATES VILLUS HEIGHT IN THE SMALL HYDESTINE, CONCOMITANT WITH INCREASED CRYPT

** CELL PROLIPERATION AND DECREASED ENTERCOUTES APOPTICSIS.

CC CLL PROLIPERATION AND DECREASED ENTERCOUTES APOPTICSIS.

CC CIA. PROLIPERATION AND DECREASED ENTERCOUTES APOPTICSIS.

CC CIA. INDICATION: PRODUCED IN THE A CHILL OF THE ISLETS OF LANGERHANS

IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

CC -! SIMILARITY: BELONGS TO THE GLUCAGON PAMILY.
                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMED outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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REMEL: AF77674; AA866901; -.

REMEL: AF77674; AA866901; -.

REMEL: AF77674; AA866901; -.

RESP: POLAT4; LGCM.

REMEL: PF00123; GLCGM.

REMEL: PF00123; LOCAGOM.

REMEL: PF00125; GLCGACM.

REMEL: SMOONO9; GLCGA.

REMEL: SMOONO9; GLCGA.

REMEL: PF00125; GLCGACM.

REMEL: SMOONO9; GLCGACM.

REMEL: PF00125; GLCGACM.

REPTIDE 21 50 GLCGNTIN-RELATED POLYPEPTIDE.

THEPTIDE 21 50 GLCGACM.

THERPIDE 3 01 GLCGACM.

THERPIDE 48 99 GLCGACM.

THERPIDE 14 14 14 GLCGACM.

SROUENCE 180 AA: 20906 NM: 595AA6DD9A589950 CRC64;
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Hystricognathi; Octodontidae; Octodon.

WCBI_TAXID=10160;

SEQUENCE FROM N.A.

MEDLINE-91155952; Pubmed=2293024;

Mishi M., Steiner D.F.;

"Cloning of complementary DNAs encoding islet amyloid polypeptide, insulin, and glucagon precursors from a New World rodent, the degu, octodon degus.";
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01-ADG-1991 (Rel. 19, Last sequence update)
28-FBB-2003 (Rel. 41, Last annotation update)
Glucagon precursor [Contains: Glicentin-related polypeptide (GRPP);
GLucagon; Glucagon-like peptide 1 (GLP1); Glucagon-like peptide 2
(GLP2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 161; DB 1; Length 180; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 31; Conservative 0; Mismatches 0; Indels (
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PIR, C36118; GCRTDJ.
HSSP, PO1274, 1620.
InterPro; IPRO0532; Glucagon.
PRIMTS; PR00275; GLUCAGON.
PRIMTS; SM00070; GLUCAGON.
PROSITE; PS00260; GLUCAGON; 4.
Glucagon family; Hormone; Cleavage on pair of basic residues; Signal;
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MEDIINE-85054853; PubMed-6034539;
Heinrich G., foros P., Habener J.F.;
HGlucagon gene sequence. Four of six exons encode separate functional
domains of rat pre-proglucagon.";
J. Biol. Chem. 259:14082-14087(1984).
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Bukaryota; Metazoa: Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria: Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBL_TaxID-10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-7AN-1988 (Rel. 06, Created)
01-7AN-1988 (Rel. 06, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Glucagon precursor {Contains: Glicentin-related polypeptide (GRPP);
Glucagon; Glucagon-like peptide 1 (GLP1); Glucagon-like peptide 2 (GLP2)].
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AMIDATION (G-128 PROVIDE AMIDE GROUP).
6E8836160A9A3051 CRC64;
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Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPOSITION, AND SEQUENCE OF 55-83.
                                                                                                                                                                                                                                                                                                                                                                                                                               EBS Lett. 264:117-120(1990).
                                              Gallus.
NCBL_TaxID=9031, 9103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 55-83.
                                                                                                                                                           RP SEQUENCE FROM N.A.

RAY MEDITAGE 61040242, pubMed=3528148;

RA MEDITAGE 61040249, pubMed=3528148;

RA MEDITAGE 61040249, pubMed=3528148;

RA MEDITAGE 61040249, pubMed=3528148;

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1. SIMILARIY: BELONGS TO THE GLUCKGON PARITY.

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1. SIMILARIY: BELONGS TO THE GLUCKGON PARITY.

C. SIMILARIY: BELONGS TO THE GLUCKGON PARITY.

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DR REMEL; KOSBEL); AAA41235-1; JOUNED.

DR REMEL; ROSBEL); AAA41235-1; JOUNED.

DR REMEL; ROSBEL); AAA41235-1; JOUNED.

DR REMEL; ROSBEL); ARAA41235-1; JOUNED.

PROPER 185P; PRODUCED IN THE CHECKAGON INTER PEPTIDE 2.

THE PROPIDE 21 TROUGH CHECKAGON INTER PEPTIDE 2.

THE PROPIDE 210 TROU
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POLZT; 031410.
21-JUL-1986 (Rel. 01, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annocation update)
38-FEB-2003 (Rel. 41, Last annocation update)
61ucagon precursor [Contains: Glicentin-related polypeptide (GRPP); Glucagon, Ilke peptide 2
"Pre-proglucagon messenger ribonucleic acid: nucleotide and encoded amino acid sequences of the rat pancreatic complementary deacyribonucleic acid."; andocrinology 115:2176-2181(1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GDP2)].

(GLP2)].

(Gllus gallus (Chicken), and
Meleagris gallospyco (Common turkey).

Eukaryota, Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 161; DB 1; Length 180; 100.0%; Pred. No. 1.3e-15; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31; Conservative
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Best Local Similarity
Matches 31; Conserv
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GLUC_CHTCK
LO GLUC_CHTCK
AC PO1277
AC 21-701
DT 28-FEB
DF GLUCAG
DE GLUCAG
DE GLUCAG
DE GLUCAG
DE GLUCAG
CO CARALUS
CO CARALUS
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RAY STREETS—M. GAILDORANCE OF 55-83.

RAY STREETS—M. GAILDORANCE OF 55-83.

RAY BAKKUSSEN J. FrandSen B.K., Hedding L.G., Sundby F.;

RAY BAKKUSSEN J. FrandSen B.K., Hedding L.G., Sundby F.;

RAY BAKKUSSEN J. FrandSen B.K., Hedding L.G., Sundby F.;

RAY TURKEY GIUGAGON: CTYSTAILIZATION, amino acid composition and ray immunology.";

REDINGTION: PROMOTES HYDROLYSIS OF GITCOGEN AND LIPIDS, AND RAISES C. THE BLOOD STAR LEVEL.

-I FUNCTION: PROMOTES HYDROLYSIS OF GITCOGEN AND LIPIDS, AND RAISES C. THE BLOOD STAR LEVEL.

-I SOID—POLITY-1: Sequence—VEP_001753, VSP_001754;

RANDSTAIL STALL AND THE REDINGS OF THE ISLETS OF LANGERFANS IN RESPONSE TO A DROP IT WE BLOOD STAR CONCENTRATION.

-I INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERFANS IN RESPONSE TO A DROP IT WE BLOOD STAR CONCENTRATION.

-I INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERFANS IN RESPONSE TO A DROP IT WE BLOOD STAR CONCENTRATION.

-I INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERFANS IN RESPONSE TO A DROP IT WE BLOOD STAR CONCENTRATION.

-I INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERFANS IN RESPONSE TO A DROP IT WE BLOONGS THE COMPOSITION OF TURKEY GIUCAGON APPEARS TO BE IDENTICAL WITH CHICKEN.

-I INDUCTION: PRODUCED IN THE A CELLS OF THE ISLEDS OF LANGERFAND IN THE STALL OF THE A CELLS OF THE ISLONGS OF TH
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R Ffan: PF00123; Glucagon.

DR PRINTS: PR00275; GLUCAGON.

DR SMART; SM00070; GLUCAGON.

DR PKOSITE; PS00260; GLUCAGON.

DR PKOSITE; PS00260; GLUCAGON.

RW Glucagon family; Hormone; Cleavage on pair of basic residues; Signal;

KW Amidation, Alternative splicing.

FT SIGNAL.

23 52 GLICENTIN-RELAIED POLYPEPTIDE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SPECIENCE FROM N.A. (ISOFORM INTESTINAL).
SPECIES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-CHICES-C
                                                                                                                                                                                                                                                                                                                                                                   *Nucleotide sequence determination of chicken glucagon precursor cDNA, Chicken preproglucagon does not contain glucagon-like peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SPECIES-Chicken;
MEDLINE-76662271; PubMed=1194290;
POLIOCK H.G., Kinmel J.R.;
"Chicken glucagon, Isolation and amino acid sequence studies.";
J. Biol. Chem. 250:9377-9380(1975).
SECUENCE FROM N.A. (ISOFORM PANCREATIC).
SPECIES-CHICKED: TISSUB-PADICESS:
MEDIINNE-0401949; PubMed-2138135;
Hasegawa S., Terazono K., Nata K., Takada T., Yamamoto H.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Isold-012956-2; Sequence=VSP_001756, VSP_001757;

-1 TISSUE SPECIFICITY: Isoform LPII is expressed in both pancreas and intertine. Expression of isoform LPI is restricted to the pancreas. Neither isoform is detected in salivary glands.

-1 INDUCTION: Produced in the a cells of the islets of langerhans in response to a drop in blood sugar concentration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. (ISOFORMS LPI AND LPII), AND TISSUE SPECIFICITY.
TISSUE-Intestine, and Pancreas;
MEDILINE-97172477; PubMed-9020121;
Chen Y.B., Drucker D.J.;
"Itssue-specific expression of unique mRNAs that encode proglucagon-derived peptides or axendin 4 in the lizard.";
-1. Biol. Chem. 272.4108-4115(1997).
-1. FUNCTION: Promotes hydrolysis of glycogen and lipids, and raises the blood sugar level.
-1. ALDERNATURE PRODUCTS:
EVENT-ALDERNATURE PRODUCTS:
MORE THE STATEMENT OF THE SPLICING; Named isoforms=2;
                                                                                                                                                                                                                                                     Gaps
                                                                                              147 20 AMIDATION (G-148 PROVIDE AMIDE GROUP).
151 151 D -> E (in isoform Pancreatic).
7FIGAVSP 001753.
152 206 Missing (in isoform Pancreatic).
7FIGAVSP 001754.
206 AA; 23875 MW; AB299EIB02FC6AA4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                           O12955, O12955,
2012955, O12955,
2012955, O12955,
2012955, O12955,
2012955, O12955,
20129503 (Rel. 41, Last sequence update)
20129503 (Rel. 41, Last annotation update)
30100000 precursor [Contains: Glicentin-related polypeptide (GRPP) Glicegon; Glicegon-like peptide 1 (GLP-1); Glicagon-like peptide 2 (GLP-2)].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (our-1)].

Heloderma suspectum (Gila monster).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;

Heloderma.

Heloderma.

1012_TaxID-8554;
                                                                                                                                                                                                                                                   ;
;
                                                                                                                                                                                                               Query Match 92.5%; Score 149; DB 1; Length 206; Best Local Similarity 87.1%; Pred. No. 7.2e-14; Matches 27; Conservative 3; Mismatches 1; Indels
                                       GLUCAGON-LIKE PEPTIDE 1.
                                                                   GLUCAGON-LIKE PEPTIDE 2.
                                                                                                                                                                                                                                                                                                          118 HAEGTYTSDITSYLEGQAAKEFIAWLVNGRG 148
                                                                                                                                                                                                                                                                                   1 HAEGIFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Name=LPII;
IsoId=012956-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HSSF; FOLZ/4; 190N.
InterPro; IPR000532; Glucagon
Pfam; PR00123; hormone2; 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; U77612; AAB51129.1; -.
EMBL; U77611; AAB51128.1; -.
HSSP; P01274; 1GCN.
     83
116
147
163
198
206
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PROPEP
PEPTIDE
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RX PADLINE-88257102; PubMed=3260236;

RX PELINE-88257102; PubMed=3260236;

RY TISSUE-PEROCREAS;

RADLINE-88257102; PubMed=3260236;

RY TISOLATION OF PEPTIGE DOING TO BE PROCREASED OF The bullfrog of RY TISOLATION OF PEPTIGE AND THE PEROCREASED OF PROCREASED OF THE PROCREASED OF THE TENDETHIN, and the AUGUSTON OF GLYCOGEN AND LIPIDS, AND RAISES OF THE BLOOD SUGAR LEVEL.

THE BLOOD SUGAR LEVEL.

THE BLOOD SUGAR LEVEL.

THE BLOOD SUGAR LEVEL.

THE SECONSE TO BROODED IN THE A CELLS OF THE ISLETS OF LANGERHANS OF THE SECURITY.

THE RESPONSE TO A DROP IN PLOOD SUGAR CONCENTRATION.

THE REPORTES SEQUENCES.

TO THER SPECIES SEQUENCES.

THE SELONGS TO THE SUCAGON FAMILY.

THE SELONGS TO THE SUCAGON FAMILY.

THE SECONSTS, GLUCAGON.

BR SMARTY, SANOOTOS; GLUCAGON.

THE STATES PROODES GLUCAGON.

THE STATES PROODES TO THE CLUCAGON.

THE STATES PROODES TO THE CLUCAGON.

THE SERVEN; SANOOTOS; GLUCAGON.

THE PEPTIDE TO THE THE SECONSTS.

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Gaps
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D -> E (in isoform LPI).
FYTIG-VSP-001756.
Missing (in isoform LPI).
FTIG-VSP-001757.
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P15428, P15439; P15440.
P15428, P15439; RE1440.
D1-APR-1990 (Rel. 14, Created)
O1-UJL-1993 (Rel. 26, Last sequence update)
O1-UJL-1993 (Rel. 26, Last annotation update)
G1ucagon precursor (Fragments).
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml; Amphibia; Batrachia; Annura; Neobatrachia; Ranoidea; Raniae; Rana.
MCBI_TaxID=8400;
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GLUCAGON-36 (OXYNTOMODULIN).
GLUCAGON-LIKE PEPTIDE 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             204 AA; 23553 MW; B132E3FE46873E72 CRC64;
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316287B7BAEIC8F7 CRC64;
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1 36 GLUG
39 70 GLUG
70 71 103 GLUG
1 103 AA, 11719 MW; 3
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Best Local Similarity
Matches 23; Conserv
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EMBL: V00652: CAA25905.1; -...

BRISP: PF00124; IGCN.

InterPro; IPR000525; Glucagon.

BR FF00174; IGCN.

INTERPS: FR00075; Glucagon.

BR FMINTS: FR00075; Glucagon.
PROCESSING.

MEDLINE-86286913; PubMed-3526301;

Me B.D., Andrews P.C.;

Noe B.D., Andrews P.C.;

T "Specific glucagon-related peptides isolated from anglerfish islets

T "Specific glucagon related peptides of (pre)proglucagon-II.";

Peptides 7:331-338(1986).

T "RENOVION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS

T "INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS

TO "I RESPONSE TO A DROPE IN BLOOD SUGAR CONCENTRATION.

CC -1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.

CC -1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.

CC -1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.

CC -1- SIMILARITY: PRODUCED IN THE STATEMENT OF THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PEPTIDE
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GLULXENIA

GLULXENIA

O 042143

DT 28-FEB

CALP-1

DE GLU-1

CALP-1

DE GLU-1

REP

TESULE

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GLUZ_LOPAM
ID GLUZ_LOPAM
ID GLUZ_LOPAM
STANDARD, PRT; 122 AA.

AC P04032,
DT 01-NOV-1986 (Rel. 03, Leasted)
DT 01-NOV-1986 (Rel. 03, Least sequence update)
DT 01-NOV-1986 (Rel. 40, Least annotation update)
DT 16-CCT-2001 (Rel. 40, Least annotation update)
DE Glucagon II Glucagon-like peptide II].
DE Glucagon II Glucagon-like peptide II].
CLOPHING americans (American goosefish) (Anglerfish).
SE Lophius americans (Ancrean goosefish) (Anglerfish).
CC Actinopterygii, Neopterygii; Teleostei; Buteleostemi;
CC Actinopterygii, Neopterygii; Teleostei; Buteleostei;
CC Acanthomorpha; Paracanthopterygii; Lophiiformes; Lophiidae; Lophius.
RN L1 RAXID-8073;
RN L1 RAXID-8073;
RN L1 RAXID-8073;
RA Lund P.K., Goodman R.H., Wontminy M.R., Dee P.C., Habener J.F.;
Anglerfish islet pre-proglucagon II. Nucleotide and corresponding
RT amino acid sequence of the CDMA.",
RL J. Biol. Chem. 258:3280-3284(1983).
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                                                1 HAEGIFTSDVSSYLEGQAAKEFIAWLVKGR 30
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ACTUAL XENIA STANDARD; PRT; 266 AA.

AC 242143;
AC 402143;
AC 28-FEB-2003 (Rel. 41, Last sequence update)
AT 28-FEB-2003 (Rel. 41, Last sequence update)
AT 28-FEB-2003 (Rel. 41, Last sequence update)
AT 28-FEB-2003 (Rel. 41, Last seniotation update)
BE Glucagon I precursor [Contains: Glucagon; Glucagon-like peptide 18 (GLP-1B); Glucagon-like peptide 18 (GLP-1B); Glucagon-like peptide 10 (GLP-1B); G
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      GLICENTIN-RELATED POLIPEPTIDE. GLUCAGON II.
                                                                                                                                                                                                                                                                                                                                                 Query Match 78.3%; Score 126; DB 1; Length 122; Best Local Similarity 71.0%; Pred. No. 7.5e-11; Matches 22; Conservative 6; Mismatches 3; Indels
22 49 GLICENTIN-RELATED POLYEEP:
52 80 GLICAGON II.
83 86 GLICAGON-LIKE PEPTIDE II.
122 AA; 14171 MW; 5140AC47EF915519 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 HAEGTFISDVSSTLEGGAAKEFIAWLVKGRG 31
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the blood sugar level.

CC '1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration of the burson the Swiss Institute of Bioinformatics and the EMEM. outstation of the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial or send an email to license agreement (See http://www.isb-sib.ch/announce/cc or send an email to licenseeisb-sib.ch).

EMEM: AEON4433 AB65661.1; -.

EMEM: AEON4433 AB65661.1; -.

EMEM: AEON40433 AB65661.1; -.

EMEM: AEON40433 AB65661.1; -.

EMEM: AEON40433 AB65661.3; 
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142
175
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219 AA;
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BRSP; PO1274: 1GCN.

DR PRINTS: AB65560.1; -.

BRART; SK00070; GLUCAGON.

DR PRINTS: SK00070; GLUCAGON.

DR PROSTE; PS00250; GLUCAGON.

KW Glucagon family: Alternative splicing.

FRINGE 21 50 GLUCAGON.

TROVED 21 50 GLUCAGON-LIKE PEPTIDE IA

PROPED 51 133 GLUCAGON-LIKE PEPTIDE IA

PROPED 51 132 GLUCAGON-LIKE PEPTIDE IA

PROPED 51 132 GLUCAGON-LIKE PEPTIDE IA

PROPED 52 133 GLUCAGON-LIKE PEPTITE

THE 142 172 GLUCAGON-LIKE PEPTITE

THE 142 173 GLUCAGON-LIKE PEPTITE

THE 142 173 GLUCAGON-LIKE PEPTITE

THE 142 1
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28-PEB-2003 (Rel. 41, Last sequence update)
28-PEB-2003 (Rel. 41, Last sequence update)
28-PEB-2003 (Rel. 41, Last sequence update)
38-PEB-2003 (Rel. 41, Last sequence update)
61-18,5 (Lucagon II) precursor (Contains: Glucagon; Glucagon-like peptide la (GLP-1B); Glucagon-like peptide la (GLP-1B); Glucagon-like peptide la Kenpus laevis (African clawed frog).
Enkaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutelecstomi; Amphibia; Batrachia; Anordata; Resobatrachia; Pipoidea; Pipidae;
NGCBL_TAXID-8355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "The Xenopus proglucagon gene encodes novel GLP-1-like peptides with insulinotropic properties.", Proc. Natl. Acad. Sci. U. S. 94:7915-7920(1997).

- FUNCTION: Promo. Sci. U. S. A. 94:7915 of glycogen and lipids, and raises
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TISSUB-17188292; Pubwed-9223287;
IIWID D.M., Satkunarajah M., Wen Y., Brubaker P.L., Pederson R.A.,
Wheeler M.B.;
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/FTId~VSP_001755.
544F7BBC20AF872C CRC64;
                                                                                                                      ISOIG=042143-2; Sequence-VSP_001755; SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
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           Name-1;
IsoId=042143-1; Sequence=Displayed;
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Best Local Similarity 70.0
Matches 21; Conservative
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20 POTENTIAL.
50 GLUCAGON.
133 GLUCAGON-LIKE PEPTIDE IA.
172 GLUCAGON-LIKE PEPTIDE IB.
178 GLUCAGON-LIKE PEPTIDE IB.
210 GLUCAGON-LIKE PEPTIDE IC.
219 A. 25271 MW, ACC699233C362CEO CRC64;
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                     GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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161
1 HAEGIFTSDVSSYLEGQAAKEFIAWLVKGRG 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
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52	Q8MJ25	Q8MJ25;	01-0CT-2002	01-0CT-2002	01-MAR-2003 (TrEMBLrel. 23,	Preproglucagon (Fragment).	Ovis aries (Sheep).	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Mammalia, Eutheria, Cetartiodactyla, Ruminantia, Pecora, Bovoidea,	Bovidae; Caprinae; Ovis.	NCBI_TaxID-9940;	[7]	SEQUENCE FROM N.A.	TISSUE=Pancreas;	Limesa	"Characterization of the endocrine pancreas in an ovine placental	insufficiency IUGR fetus.";	Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases	EMBL; AF529185; AAM94409.1;	InterPro; IPR000532; Glucagon.	Pfam; PF00123; hormone2; 3.	PRINTS; PR00275; GLUCAGON.	SMART; SM00070; GLUCA; 3.	PROSITE; PS00260; GLUCAGON; 2.	NON_TER	SEQUENCE	do text	Best Local Similarity	Matches
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RESULT 2

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TISSUE-DIGIAL SMALL INTESTING, AND PANCREAS;

RX MEDIANE-S2925513; PubMed-7776976;

RX MEDIANE-S2925513; PubMed-7776976;

RY MEDIANE-S2925513; PubMed-7776976;

RY Transcripts emoding queagon: alternative splicing generates mRNA. Transcripts emoding queagon-like peptide 2.";

RY Transcripts emoding queagon-like peptide 2.";

MOI. Endocrinol. 9:267-777(1995).

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REMEL; 019918; AACGO212.1: ...

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0191911. 019108; 092188; 022189;
01-NOV-1996 (TrEMBLEL) 01, Created)
01-NOV-1996 (TrEMBLEL) 01, Least sequence update)
01-NOV-1996 (TrEMBLEL) 17, Last sequence update)
01-UNY-2001 (TrEMBLEL) 17, Last annotation update)
Glucagon I precursor.
Oncorhynchus. mysts (Rainbow trout) (Salmo gairdneri).
Enkaryota: Metazoa; Chordata; Craniata; Vertebrata; Enteleostomi;
Protacarthopterygii, Neopterygii; Teleostei; Euteleostei;
Protacarthopterygii: Salmoniformes; Salmonidae; oncorhynchus.
                                    091409; 091232;
01-NOV-1996 (TERBirel. 01, Created)
01-NOV-1996 (TERBirel. 01, Last sequence update)
01-NAV-1996 (TERBirel. 3), Last sequence update)
01-NAX-0303 (TERBIREL. 3), Last annotation update)
01-NAX-0303 (TERBIREL. 3), Last sequence update)
03-NAX-0303 (TERBIRELL. 3), Last sequence update u
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 HAEGTFISDVSSYLEGOAAKEFIAWLVKGR 30
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RP SEQUENCE FROM N.A.

RP SEQUENCE FROM N.A.

Yeung C.-M., Chow B.K.C.;

RT "Identification of a proglucagon cDNA from Rana tigrina rugulosa that mercades two GLP-Lis.";

RT ancodes two GLP-Lis.";

Gen. Comp. Endocratiol. 124:0-0(2001).

DR BEBE, ASJ4209; AAL35758.1; -.

DR InterPro: IPR00153; hormone. 4.

DR PRIMTS; PR00275; GLUCAGON.

DR PRIMTS; PR00275; GLUCAGON.

SARAR: SMO0070; GLUCAGON.

SARAR: SMOUND, GLUCAGON.

PROSITE; PS00260; GLUCAGON; 4.

SQUENCE 220 AA: 25615 MW; C72D926E7F89E381 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                             Preprogludagon.
Canist familiaris (Dog).
Canist familiaris (Dog).
Bukaryota, Matazoa: Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota, Matazoa: Carnivora; Fissipedia; Canidae; Canis.
NUSI_TaxID-9615;
[1]
SEQUENCE FROM N.A.
Irvin D.M.;
"CDMA cloning of proglucagon from the stomach and pancreas of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Proglucagon.

Bubolatrachis rugulosus.

Eukaryota, Metasoa: Chordata; Craniata; Vertebrata; Euteleostomi;

Apiphida: Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae;

ROBL_TARID-110072;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match 80.1%; Score 129; DB 13; Length 220; Local Similarity 76.7%; Pred. No. 2.9e-11; Less 23; Conservative 5; Mismatches 2; Indels C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 161; DB 6; Length 18
Best Local Similarity 100.0%; Pred. No. 3.2e-16;
Matches 31; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dog.";
submitted (SEP-2000) to the BMBL/GenBank/DDBJ databases.
EMBEL, AF308419; AAL09425.1; -
InterPro: IPR000532; Glucagon.
FRam; PR00123; hormone2; 3.
PRINTS; PR00275; GLUCAGON.
SMART; SM00070; GLUCAGON.
SMART; PR00070; GLUCAGON.
SPROSTIPE; PS00260; GLUCAGON; 2.
0951G0

Comparison of the precipitation of the properties of the p
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01-WAR-2002 (TrEMBLrel. 20, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT; 220 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
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Q91409
ID Q91409
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020 WLD
1D 020 WLD
1D 01-149
01 01-149
01 01-149
02 02 ENERGY
03 MCB_
04 MCB_
05 MCB_
06 MCB_
07 MCB_
08 MCB_
09 MCB_
09 MCB_
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PRELIMINARY;
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PRINTS; PR00275; GLUCAGON.

JR SWARY; SN0070; GLUCAGON.

RARPI: SN00706 GLUCA; 3.

ROBORD family; Hormone; Cleavage on pair of basic residues; Signal; Alternative splicing; Multigene family.

RICHAL

PEPTIDE 7 90 GRAP (GLICENTINE RELAIED POLYPEPTIDE).

PEPTIDE 5 80 GLUCAGON.

PEPTIDE 52 80 GLUCAGON.

PEPTIDE 85 120 GLUCAGON.LIKE PEPTIDE 1.

PEPTIDE 85 120 GLUCAGON.LIKE PEPTIDE 2.

PEPTIDE 137 169 GLUCAGON.LIKE PEPTIDE 2.

PEPTIDE 178 AM: SCR6980CF2A9D58E CRC64;
                                                                                                                                                                                                                                                                                                                                                          3; Indels 0; Gaps
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52 80 GLUCAGON.

85 120 GLUCAGON.LIKE PEPTIDE 1.

137 169 GLUCAGON-LIKE PEPTIDE 2.

124 178 MISSING (IN PANCREATIC ISOFORM).

178 NA; 19998 MW: EB9D73866CD91C66 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  091189 PRELININARY, PRT; 178 AA.
091189; 092168;
01-NOV-1996 (TrEMBirel. 01, Created)
01-NOV-1996 (TrEMBirel. 01, Last sequence update)
01-NOV-1996 (TrEMBirel. 23, Last annotation update)
01-MAR-2003 (TrEMBirel. 23, Last annot
                                                                                                                                                                                                                                                                                                          Query Match 73.3%; Score 118; DB 13; Length 178; Best Local Similarity 66.7%; Pred. No. 1e-09; Matches 20; Conservative 7; Mismatches 3; Indels C
                                                                                                                                                                                                                                                                                                                                                                                              1 HAEGTFTSDVSSYLECQAAKBFIAWLVKGR 30
||:-||:-||:||:||:||:|| ||
90 HADGTYTSDVSTYLQDQAAKDFVSWLKSGR 119
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Best Local Similarity 65.5
Matches 19; Conservative
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VARSPLIC
SEQUENCE
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O9DDE6
PRELIMINARY, PRT; 121 AA.
O9DDE6;
O10-MAR-2001 (TrEMBLRE1. 16, Last sequence update)
O1-MAR-2001 (TrEMBLRE1. 16, Last sequence update)
O1-OCT-2002 (TrEMBLRE1. 22, Last annotation update)
OCGO CR GLU.

Exachydanio rerio (Zebrafish) (Danio rerio).

Exachydanio rerio (Zebrafish) (Danio rerio).

Evaryota, Metazoa; Chordata; Caniata; Vertebrata; Euteleostoni; Actinopteryqii, Neopteryqii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Danio.

WIBI_TaxID=_TaxID=_7955;
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01-YAR-2001 (TrEMBLrel. 16, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
Proglicagon (Frammer).
Ambicphites rupestris (Rock bass).
Actinopterygii, Metzer Craniata; Vertebrata; Buteleostomi; Actinopterygii, Mepterygii, Feleostei; Buteleostei; Mocheleostei; Morpiterygii, Feleostei; Buteleostei; Mocheleostei; Morpiterygii, Percomorpha; Perciformes; Percoidei; McBl_TaxID=109273;
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RN FULLIARID 1930;
RN [1]
RN FULL CALOUN N.A.
MADLINE-99425190; PubMed-10495291;
RN MEDLINE-99425190; PubMed-10495291;
RN Argenton E., Zeachin E., Bortolussi M.;
Rarly appearance of pancreatic hormone-expressing cells in the zebrafish embryo.";
RN EMEL Dev. 87:217-221(1999).
RN EMEL Dev. 87:217-221(1999).
RN EMEL AJ13697; CAC20108.1; -.
RN ESP P01274; IGCN.
RN FROME PRO0129: Jacq.
RIFER PRO0129: ALTOROGON.
RART: SM0070; GLUCAGON.
SMRAT: SM0070; GLUCAGON.
RN PROSITE; PS00260; GLUCAGON.
CHAIN OF THE PROSITE PS00260; CLUCAGON.
CHAIN OF THE PROSITE PS00260; CLUCAGON.
CHAIN OF THE PROSITE PRODICE CLUCAGON.
CHAIN OF THE PROSITE CLUCAGON.
CHAIN OF THE PROSITE CLUCAGON.
CHAIN OF THE PROSITE CLUCAGON.
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Al-Mahrouki A.A., Irwin D.M., Youson J.H.,
Nock Bass Proglucagon.,
Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.
EMBL, AR190499; AAG16778.1; -.
HSSP, POL274; IGCN.
InterPro: IPRO0033; Glucagon.
PREMISP: PRO0123; hormone2; 2.
PRINTS; PR00275; GLUCAGON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHAÍN 49 79 GLOCAGON.
CHAIN 88 121 GLOCAGON-LIKE PEPTIDE 1.
SEQUENCE 121 AA; 13537 MW; A85385F690DA180F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT; 96 AA.
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090643
1D 090643
1D 09064
1D 09064
1D 01-M
1D
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PRT; 144 AA.

us-09-719-410-3.rspt

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RN 113

RN 113

RN 114

SEQUENCE FROM N.A.

RN MISSUE-Small intestine;

RAILNE-257EL/61; IISSUE-Small intestine;

RAILNE-1085660; Wanded-112.1851;

RA Arakawa T., Shinaqawa A., Shinata K., Yoshino M., Itoh M., Ishii Y.,

RA Arakawa T., Hara A., Eukunishi Y., Konno H., Adachi J., Fukuda S.,

Arawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

RA Arawa K., Izawa M., Nishi K., Kiyosawa H., Kando S., Casavani T.,

RA Saito T., Okazahi Y., Gasaterland T., Gissi C., King B., Kochiwa H.,

RA Ruchi P., Lewis S., Matsud W., Ashburner M., Batalov S., Casavani T.,

RA Ruchi P., Lewis S., Matsud V., Nikaldo I., Pesole G., Quackenbush J.,

RA Ruchi P., Lewis S., Matsud V., Nikaldo I., Pesole G., Quackenbush J.,

RA Ruchi P., Lewis S., Matsud W., Nikaldo I., Pesole G., Quackenbush J.,

RA Sait K., Okido T., Fluruno M., Anno H., Baldarelli R., Barbi G.,

RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,

RAN Sait M. J., Bull D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,

RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,

RA Gustincich S., Hill D., Mormann M., Railli J., Mombaerts P.,

RA Gustincich S., Hill D., Mormann M., Railli J., Mombaerts P.,

RA Sasaki H., Sato K., Schoenbach C., Saya T., Shibata Y., Storch K.-F.,

RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,

RASHI, AKOO8308; Baba5592.1; -.

RAN RAB, PROLINGS; Glucagon.

R FRAN, PROUNCS; Glucagon.

R FRAN, PRONOSCO; GLUCAGON; 1.

R FRAN, PROSITE; PSO0260; GLUCAGON; 1.

R PROSITE; PSO0260; GLUCAGON; 1.

SEQUENCE 144 AA, 16389 WN; 36E61866504DARCS CRC64;
                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (Mouse),
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammaila; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBI_TaxID=10090;
                                                                                                                                                                                                                01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-DGC-2001 (TrEMBLrel. 19, Last annotation update)
Gastric inhibitory polypeptide.
                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
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SECURICE FROM N.A.

C. STRAIN-CZ7BL/65, TISSUD-Small intestine;

K. MEDINE-21085660; PubMed=11217851;

K. MEDINE-21085660; PubMed=11217851;

K. MARANA T., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,

K. MATAWA K., Izawa M., Nishi X., Kiyosawa H., Kodon S., Yamanka I.,

Sato T., Okazaki Y., Golobori T., Bono H., Rasikawa T., Saito R.,

R. Adota K., Matsuda H.A., Ashburner M., Bataloo S., Yamanka I.,

R. Fleischmann M., Gaasterland T., Gissi C., King B., Kochiwa H.,

R. Kochim P., Lewis S., Matuco Y., Nikaido I., Pesole G., Quackenbush J.,

R. Koshim L.M., Stabhli F., Suzuki R., Tomita M., Wagner L., Washio T.,

Sakai K., Okido T., Furumo M., Anon H., Baldarelli R., Barsh G.,

Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,

Sakai K., Okido T., Furumo M., Anon H., Baldarelli R., Barsh G.,

R. Buromstein M.J., Bult C., Fletcher C., Filites M., Gariboldi M.,

Gustincich S., Hill D., Hofmann M., Hume D.A., Kamlya M., Lee N.H.,

Lyons P., Marchionni L., Mashima J., Mazarelli J., Mombaerts P.,

R. Sasaki H., Sato K., Schembach C., Seya T., Sakancto N.,

Sasaki H., Sato K., Schembach C., Seya T., Sakancto N.,

Sasaki H., Sato K., Schembach C., Seya T., Sakancto N.,

Sasaki H., Sato S., Sohida K., Hasegawa Y., Kawaji H., Kohtsuki S.,

Hayashizaki Y.,

REMB., AKOOSES, BABZSTZO.!; -.

REMB., AKOOSES, BABZSTZO.!; -.

RESP: POLTSY: JOSKA. Gin.

RESP: POLTSY: JOSKA. Gin.

RESP: POLTSY: JOSKA. Gin.

RESP: POLTSY: JOSKA. Gin.

RESP: POLTSY: JOSKA. Gin.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammaila; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBL_faxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 41.6%; Score 67; DB 11; Length 130; Best Local Similarity 41.9%; Pred. No. 0.038; Matches 13; Conservative 7; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                         Match
Local Similarity 46.7%; Pred. No. 8.7e-06;
local Similarity 46.7%; Pred. No. 8.7e-06;
les 14; Conservative 10; Mismatches 6; Indels
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                                                                                                                                 1 >29 GLDCAGON.
39 >70 GLDCAGON-LIKE PEPTIDE 1.
96 >96 GLUCAGON-LIKE PEPTIDE 2.
96 96 A3: 11225 NW; 6435033EBDDCOOCE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DOCKIN. (TremBirel. 17, Created)
01-JUN-2001 (TremBirel. 17, Last sequence update)
01-JUN-2001 (TremBirel. 19, Last sequence update)
01-DEC-2001 (TremBirel. 19, Last annotation update)
Gagtric inhibitory polypeptide (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT; 130 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 HAEGTFISDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MGD; MGI:107504; Gip.
InterPro; IFR000532; Glucagon.
Pfam; PF00123; hormone2; 1.
SMART; SM0070; GLUCA; 1.
PROSITE; PS00260; GLUCAGON; 1.
SMART; SM00070; GLUCA; 2.
PROSITE; PS00260; GLUCAGON; 1.
NON_TER 1 1 GL
CHAIN 1 >29 GI
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CHAIN
NON_TER
SEQUENCE
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Best Local S:
Matches 14
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RESULT 9

RO CONTROLL

OD TO 1-09

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RESULT STREET

RA MEDII

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OSMITY PRELIMINARY; PRT; 170 AA.

GRAZT7:

GRAZT8.

GRAZTRA

GRAZT8.

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GRAZTRA

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GRAZT
Query Match 41.6%; Score 67; DB 11; Length 144; Best Local Similarity 41.9%; Pred. No. 0.043; Matches 13; Conservative 7; Mismatches 11; Indels
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MEDLINE-22092342; PubMed=12097482;
Hamelink C., Lee H.-W., Chen Y., Grimaldi M., Eiden L.E.;
                                                                                                                                                                                                                                          1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG 31
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:||||| || :: ::|: || 30 YAEGTFISDYSIAMDKIRQQDFVNWLLAQRG 60 1 HAEGTFTSDVSSYLEGOAAKEFIAWLVKGRG 31

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Gaps

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us-09-719-410-3.rspt

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11; Indels
       13; Conservative 6; Mismatches
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                                                                         1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            314 HAKGKFAGSINIEKKGKSAQEFVALLPR 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 HAEGTFTSDVSSYLEGOAAKEFTAWLVK 28
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Best Local Similarity 39.3%
Matches 11; Conservative
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09DE29
         Matches
                                                                                                                                                      RESULT 13
Q93IH2
ID Q93IH
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SEQUENCE FROM N.A.

SEQUENCE TROM N.A.

SEQUENCE TROM N.A.

KARAIN-CTRILGO, TISSUE-CECUM;

KARAIN-CTRILGO, TISSUE-CECUM;

KARAIN-CTRILGO, TISSUE-CECUM;

KARAIN-CTRILGO, TISSUE A., Shibata K., Yoonno H., Adachi J., Fukuda S.,

Alazwa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

Sato T., Okrazwi Y., Oclobori T., Bono H., Kasukawa T., Saito R.,

Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

Ruchil P., Lewis S., Matsuch T., Gissi C., King B., Kochiwa H.,

Kuchil P., Lewis S., Matsuch T., Gissi C., King B., Kochiwa H.,

Ruchil P., Lewis S., Matsuch T., Comita M., Wagner L., Washio T.,

Ruchil P., Lewis S., Matsuch Y., Nikaido I., Pesole G., Quarkenbush J.,

Ruchil P., Lewis B., Walth T., Suzuki R., Tomita M., Wagner L., Washio T.,

Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,

Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,

Gustinoich S., Hill D., Hoshman M., Hume D.A., Kamiya M., Lee N.H.,

Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,

Kan Wordone P., Kang B., Ringwald M., Rodiquez I., Sakanoko N.,

Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,

Sasaki H., Toyo-oka K., Wasigawa Y., Kawaji H., Kohtsuki S.,

Havashiraki V.
                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse).
Makaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia: Eutheria; Rodentia; Sciurognathi, Muridae; Murinae; Mus
NGBL_TAXID-10099.
"Coincident elevation of cAMP and calcium influx by PACAP-27 synergistically regulates vascactive intestinal polypeptide gene transcription through a novel PKA-independent signaling pathway."
J. Neurosci. 22:5310-5320(2002).
J. Neurosci. 22:5310-5310-1.
InterPro: IPRO00532; Glucagon.
Pfant: PP00133; hormone2; 2.
Pfant: PF000133; Glucagon.
Pfant: SM00775; GLUCAGON.
SNARP: SM00776; GLUCAGON.
SNARP: SW007070; GLUCAGON.
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unctional annotation of a full-length mouse cDNA collection.";
ture 409:885-696(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36.6%; Score 59; DB 11; Length 171; 43.3%; Pred. No. 0.87;
                                                                                                                                                                                                                                                                                                                                                Query Match 37.3%; Score 60; DB 6; Length 170; Best Local Similarity 43.3%; Pred. No. 0.61; Matches 13; Conservative 6; Mismatches 11; Indels
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171 AA; 19135 NW; 134A434DB6DF1254 CRC64;
                                                                                                                                                                                                                                         1 22 POTENTIAL.
81 107 PH1.
125 152 VIP.
170 AA; 19164 MW; 9C6A6049AF7BFF81 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09D227;
01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-CTT-2002 (TrEMBLrel. 22, Last annotation update)
Vasoactive intestinal polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT; 171 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                      1 HAEGTFISDVSSYLEGQAAKEFIAWLVKGR 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
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CHAIN
SEQUENCE
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"Characterization of the gene encoding both growth hormone-releasing hormone (GFP) and pituitary adenylate cyclase-activating polypeptide (PACAP) in the zebrafish.", Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.

EMBL: AR21/251, ARG36782.11. "
ETIN: ZDB-GENE-020809-4; adopt.

InterPro: IPR0000532; Glucagon.
                                                                                                                                                                                                 STRA.
Wolhella succinogenes.
Bacteria; Proteobacteria; Epsilonproteobacteria; Campylobacterales;
Helicobacteraceae; Wolfnella.
NCBI_TaxID=844;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              activation polypeptide.

Brachydanio relio (Zebrafish) (Danio rerio).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Cyrinolderygii; Neopterygii; Teleostei; Ostariophysi; Cypriniforme (Cyrinolder).

NCBL_PaxID=7955;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam: PF00123; hormone2; 2. PRINTS: PR00275; GUUCAGON. SNART; SW00070; GLUCA; 2. PR05TF; PS00269; GLUCA; 2. PR05TF; PS00269; GLUCAGON; 2. GROWTH HORMONE-RELEASING HORMONE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09DE29,
01-MRA-2001 (TEMBLrel. 16, Created)
01-MRA-2003 (TEMBLrel. 16, Last sequence update)
01-MAR-2003 (TEMBLrel. 23, Last annotation update)
Growth hormone-releasing hormone/pituitary adenylate cyclase-
                                                                                                                                                                                                                                                                                                                                                                                    Schoelder P.V., Simon J., Klimmek O.;
Schoelder P.V., Simon J., Klimmek O.;
The sulfur transferase of Wolinella succinogenes.";
The sulfur transferase of Wolinella succinogenes.";
Submitted (ANG-2001) to the EMEL/GenBank/DDBJ databases.
EMEL, AJ318789; CAC50085.1;
Interpro; IPRO01763; Abddanese: 2.
SMART; SM00450; RHOD; 3.
SMART; SM00450; RHOD; 3.
SIGNAL
I 21 POTENTIAL.
CHAIN 22 389 SULFUR TRANSFERASE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36.6%; Score 59; DB 2; Length 389; 39.3%; Pred. No. 2.3; tive 8; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIGNAL 1 21 POTENTIAL.
CHAIN 22 389 SULFOR TRANSFERASE.
SEQUENCE 389 AA; 41949 MW; 6C60850CAD9C4B9C CRC64;
0931H2 PRELIMINARY; PRT; 389 AA.
0931H2; 01-DEC-2001 (TYEMBIAC). 19, Created)
01-DEC-2001 (TYEMBIAC). 19, Last sequence update)
01-MAR-2003 (TYEMBIAC). 23, Last annotation update)
Solfur transferase precursor.
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XX MEDLINE-21255738; PubMed-11356048;
XX SEQUENCE TROW N.A.

XX SEALS S.C., Nonnean D.;
XX Small B.C., Nonnean D.;

XX "Sequence and expression of a CDNA encoding both pituitary adenylate cyclase activating polypeptide and growth hormone-releasing hormone-rike peptide in ofannel catifish (Ictalurus punctatus).";

XX Ilke Peptide in ofannel catifish (Ictalurus punctatus).";

Gen. Comp. Endocrinol. 122:334-363(2001).

XX TheFPO: PROGOSZ; Glucagon.

XX PRAM: PRO0123; hormone.2.

XX RARI; SW00070; GLUCAGON.

XX SARI; SW00070; GLUCAGON.

XX SIGNAL

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 33.2%; Score 53.5; DB 13; Length 175; Best Local Similarity 40.0%; Pred. No. 6.1; Matches 12; Conservative 6; Mismatches 11; Indels 1; Gaps
                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIĞNAL 1 20 POTENTIAL.
CHAIN 84 128 GROWTH HORMONE-RELEASING HORMONE.
CHAIN 131 168 PITUTARY ADENTIATE CYCLASE-ACTIVATING
POLYPREPTIDE.
SEQUENCE 175 AA; 20070 MW; FFEGEA22C6832LC9 CRC64;
PT CHAIN 128 165 PITUITARY ADBNYLAYE CYCLASE-ACTIVATING POLYPEPTIDE.

SQ SEQUENCE 172 AA; 19558 MM; 458117F0042E36DD CRC64;
                                                                                                                                                                                                               Query Match 33.5%; Score 54; DB 13; Length 172; Best Local Similarity 33.3%; Pred. No. 5; Matches 10; Conservative 8; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
0900X24
0000X24
0000X6
0000X6
0000X6
01-DER
000X6
01-DER
01-DE
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Search completed: October 15, 2003, 10:55:48 Job time : 63.9836 secs

1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30

QQ ŏ

Run on:

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GLP-1(7-36). Howo Glucagon-like pept Glucagon-like pept Glucagon-like pept Glucagon-like pept GLP-1 hutant peptide GLP-1 hutant peptide GLP-1 peptide GLP-2 peptide GLP-1 peptide #2. GLP-2 peptide #2. GLP-3 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Insulinotropic; activity, enhancing insulin activity, treatment; Type II diabetes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Insulinotropin der Insulinotropin (GL Amidated Glucagon Glucagon like pept Human glucagon like pept Target peptide (GL GLucagon-like pept Glucagon-like pept Glucagon-like pept
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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| SIDSI_gcgdata_geneseq_geneseqp-embl_AA1980.DAT:*
| SIDSI_gcgdata_geneseq_geneseqp-embl_AA1981.DAT:*
| SIDSI_gcgdata_geneseq_geneseqp-embl_AA1991.DAT:*
| SIDSI_gcgdata_geneseq_geneseqp-embl_AA2001.DAT:*
| SIDSI_gcgdata_geneseq_geneseqp-embl_AA2003.DAT:*
| SIDSI_gcgdata_geneseq_geneseqp-emb
                                                                                                                                                October 15, 2003, 10:33:21; search time 59.5082 Seconds (without alignments) 80.019 Million cell updates/sec
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                      GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                               1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
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                                                                                                                                                                                                                                                                                                                                                                                                          1107863 seqs, 158726573 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 2000000000
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155
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Perfect score:
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Length 30;

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Sequence 30 AA;
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                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  insulinotropic activity; GLP-1; glucagon-like protein 1; NIDDM; non-insulin dependent diabetes mellitus; insulintropin; truncated.
                                              The sequence is that of a derivative of insulinotropin which has insulinotropic activity and is useful for enhancing insulin action in a mammal, partic. for treating Type II diabetes (claimed). It is partic. suited for delivery to a mammal by ionophoresis.

(Updated on 25-MAR-2003 to correct PN field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treatment of non-insulin dependent diabetes mellitus - using glucagon-like peptide 1 or deriv. With prolonged action for sustained glycaemic control
                                                                                                                                                                                              Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lambert WJ;
                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Insulinotropin (GLP-1(7-36)) for use in treating NIDDM.
                                                                                                                                                                                          Query Match 100.0%; Score 155; DB 15; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Danley DE, Gelfand RA, Geoghegan KF, Kim Y,
Qi H, Oih, Hong Q, Yesook K;
                                                                                                                                                                                                                                                                            1 HAEGTFTSDVSSYLEGGAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                          1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                    AAR63247 standard; peptide; 30 AA.
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                Claim 3; Page 20; 32pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-FEB-1994; 94EP-0300981.
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(first entry)
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                                                                                                                                                           Sequence 30 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAR-2003
02-MAY-1995
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The naturally occurring sequence of Glucagon Like Peptide 1 (GLPL) is AARS907. It is a 36 AA peptide that has been recombinantly produced but without a mechanism for providing for the amidation of the C-terminal Arg residue. Amidated recombinant GLPL (7-36)MR2 CAR69063) was prepd. from a multicopy fusion protein conty. four copies of a modified truncated GLP peptide having AA residues A-F-A at copies of a modified truncated GLP peptide having AA residues A-F-A at residues 37-37 (GLPL (7-34)-A-F-A) (AAR69064). The recombinant GLPL residues 37-37 (GLPL (7-34)-A-F-A) (AAR69064). The recombinant GLPL attracted to yield the modified recombinant native GLPL (7-36)-NH2 (AAR69063) as follows. Trypsin was used to cleave the peptide at the Lys-Ala bond in the presence of either CSC Gly-Arg-Gly addition units so that the cleavage of the Ala-Phe-Arg leaving unit is followed by the addition of Gly-Arg-NH2 or Gly-Arg-Gly to the core GLPL (7-34) to yield either amidated 7-36 GLPL-NH2 or GLPL 7-36 with a terminal Gly (AAR69065).
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                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glucagon Like Peptide; GLP; transpeptidation; endopeptidase; trypsin; thrombin; cleavage.
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                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amidated Glucagon like peptide 1 (GLP1) (7-36)-NH2.
Query Match 100.0%; Score 155; DB 15; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                1 HABGTFTSDVSSYLBGQAAKEFIAWLVKGR 30
                                                                                                                     1 HARGTFTSDVSSYLEGOAAKEFIAWLVKGR 30
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                                                                                                                                                                                                                                                                                                                                AAR69063 standard; peptide; 30 AA.
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(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
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Modified-site
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23-AUG-1995
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                                                                                                                                                                                                                                                                                                                                                                                             AAR69063;
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us-09-719-410-4.rag

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Stimulating/inhibiting insulin release with exendin polypeptide(s) for treating diabetes mellitus and preventing hyperglycaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                              AAR80548 is the human glucagon like peptide (GLP-1), to which the Heloderma horridum/suspectum exendin-3/-4 peptides are analogous. The exendin peptides are insulinctropio, and can therefore be used in the treatment of diabetes mellitus (types I or II), and for the prevention of hyperglycaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Target peptide (GLP1(7-36)) used in fusion protein construct.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fusion protein construct; isolation; purification; growth hormone releasing factor; glucagon-like peptide 1; parathyroid hormone; inclusion body; carbonic anhydrase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Isolation and purificn of peptide(s) from fusion protein or which include a carbonic anhydrase and a variable fused polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                De LA MOTTE RS, Henriksen DB, Holmquist B, Manning SD;
Partridge BE, Stout JS, Wagner FW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 155; DB 16; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 HAEGTFTSDVSSYLEGGAAKEFIAWLVKGR 30
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AAR98956
LD AAR98956 standard; peptide; 30 AA.
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                                                                                                                           93US-0066480,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 30 AA;
                                                                                                                                                                                                       (ENGJ/) ENG J.
                                                                                                                                                                 24-MAY-1993;
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    Homo sapiens.
                                                                                                                         24-MAY-1993;
                                            US5424286-A.
                                                                                  13-JUN-1995.
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                                                                                                                                                                                                                                                    Eng J;
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Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New divalent metal complexes of glucagon-like peptide 1 - useful for treating type II diabetes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.0%; Score 155; DB 16; Length 30; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                Glucagon like peptide; GLP-1 (7-36)amide; type II diabetes; non-insulin dependent; divalent metal cation; zinc.
  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Exendin-4; diabetes mellitus; hyperglycaemia; insulinotropic peptide; glucagon like peptide; GLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 HAEGTFISDVSSYLEGQAAKEFIAWLVKGR 30
0; Mismatches
                                          1 HAEGTETSDVSSYLEGOAAKEFIAWLVKGR 30
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                                                                                                                                                                                                                                                                                                       Glucagon like peptide GLP-1 (7-36)amide.
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                                                                                                                                        RESULT 4
AAR79809
ID AAR79809 standard; peptide; 30 AA.
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30; Conservative
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Modified-site
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Matches
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Length 30; Indels

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Query Match 100.0%; Score 155; DB 17; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                      1 HABGTPTSDVSSYLBGQAAKEFTAWLVKGR 30
                                                                                    Sequence 30 AA;
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Best Local S
Matches 30
                    reaction.
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AAM 10383

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AAM 10383

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AAM 103 AAM 103
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                                                                    A new method for the isolation and/or purification of a recombinant peptide employs a fusion protein construct (FPC) comprising a carbonic anhydrase and a variable fused polypeptide containing a target peptide. The method comprises precipitating either the FPC or a fragment of the FPC including the carbonic anhydrase. An alternative method of producing the peptide comprises expressing the FPC as part of an inclusion body. The target peptides of the FPC are derived from growth hormone releasing factor (GRF), glucagon-like peptide 1 (GLP1) or parathyroid hormone (GRF), glucagon-like corresponds to amino acids 7-36 of GLP1). This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 155; DB 17; Length 30; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 HAEGTFTSDVSSYLEGQAAKEFTAWLVKGR 30
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Wagner FW;
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Claim 58; Page 50; 67pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 30 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GLP1(7-35)-NH2
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Modified-site
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Glucagon-like peptide-1 (7-36) (AAW16383) comprises amino acid residues 7-36 of rat glucagon-like peptide-1 (GLP-1) (see also AMW16384). It is naturally produced from GLP-1 in the intestine and to a lesser extent in the pancreas. GLP-1(7-36) has insulinotropic activity, being able to similate the synthesis and secretion of insulin from the pancreas. It can be produced by chemical synthesis or by proteolytic digestion of GLP-1 for use as an insulin secretagogue or for the treatment of type II diabetes (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                       Glucagon-like peptide-1(7-36); GLP-1 (7-36); insulin secretagogue; insulinotropic hormone; type II diabetes mellitus; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glucagon-like peptide-1 fragment comprising amino acids 7-36 - useful for enhancing insulin production in pancreatic islet cells, especially for treating type II diabetes mellitus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
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AAW16383 standard; Peptide; 30 AA
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                                                                                                                                                                                                              Glucagon-like peptide-1(7-36).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   910S-0756215.
86US-0859928.
88US-0148517.
90US-0532111.
93US-0156800.
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                                                                                                                 25-MAR-2003 (updated)
01-0CT-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-201513/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 30 AA;
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05-MAY-1986;
26-JAN-1988;
01-JUN-1990;
23-NOV-1993;
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New derivatives of glucagon-like peptide-1 (GLP-1) and its fragments and their analogues are disclosed in which at least one amino acid residue of the parent peptide has a lipophilic substituent attached to it. The GLP-1 fragment is preferably GLP-1(A-C) where A is 1-7 and to it. The GLP-1 fragment is preferably GLP-1(A-C) where A is 1-7 and the GLP-1 fragment is preferably GLP-1(A-C) where A is 1-7 and to its attached e.g. to the epsilon amino group of a Lys residue in the sattached e.g. to the epsilon amino group of a Lys residue in the peptide. The present sequence represents a preferred parent GLP-1 fragment to which the lipophilic substituent is to be attached. GLP-1 and its analogues and fragments may be used in treatment of clearance rate from the body, which limits their usefulness. The clearance rate from the body, which limits their usefulness. The conversion compared with known analogues, e.g. GLP-1(7-37).

(N.B. The present sequence is described by name in the patent specification but is not explicitly shown. It is deduced from the protein sequence shown in Swiss-Prot entry POL275 using information given in the patent.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                        /note= "optionally the C-terminal is in amide form"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Glucagon-like peptide-1 derivatives which have lipophilic
substituent - exhibit protracted profiles of action relative to
known glucagon-like peptide-1 compounds and are useful in
treatment of diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 155; DB 19; Length 30; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels
carboxynonadecancyl; deoxycholcyl; cholcyl; lithocholcyl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Glucagon-like peptide-1 analogue SEQ ID NO:5.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Knudsen LB, Nielsen PF, Sorensen PO;
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96DK-0000931.
96DK-0001259.
                                                                                                                                                                                                                                                                                                                 97WO-DK00340.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (NOVO ) NOVO-NORDISK AS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1998-239721/21.
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                                                                                                       Key
Modified-site
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30-AUG-1996;
08-NOV-1996;
                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                 22-AUG-1997;
                                                                                                                                                                                                            WO9808871-A1
                                                                                                                                                                                                                                                                05-MAR-1998.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The patent describes a new method of reducing body weight which comprises administration of a composition comprising: (i) glucagon-like peptide-1 (GLP-1): (ii) a GLP-1 analogue; (iii) a GLP-1 derivative; (iv) an agonist of the GLP-1 receptor; (v) an agonist of the GLP-1 scoeptor; (v) an agonist of the GLP-1 of endogenous GLP-1; (vii) a compound which stimulates synthesis of endogenous GLP-1; (vii) a compound that stimulates release synthesis endogenous GLP-1; or (viii) a salt of a material described in (i)-(vii). The method may be used for treatment of obesity. The present sequence, GLP-1 (7-36) amide, represents a preferred GLP-1 compound which can be used in the method.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Use of glucagon-like peptide-1 and analogues and derivatives - to reduce body weight, e.g., in treatment of obesity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 30;
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                                                                                                                                                                                                                                                             Glucagon-like peptide-1 (7-36) amide.
                                                                                                                                                                                                                                                                                                                   GLP-1; glucagon-like peptide; obesity,
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                                                                                                       AAW63288 standard; peptide; 30 AA.
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960S-0030213.
                                                                                                                                                                                                            29-SEP-1998 (first entry)
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Modified'site
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                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
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05-NOV-1996;
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insulinotropic; appetite suppressant.
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                                                                                                                                                                                                                                                                   (NOVO ) NOVO-NORDISK AS.
                                                                                                                                                                                                                                                                                                                                              WPI; 1999-540561/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 30 AA;
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Modified-site
                                                                                                                                                                                      27-FEB-1998;
27-FEB-1998;
08-APR-1998;
                                                                                                                                                      25-FEB-1999;
                                        Homo sapiens.
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                                                                           WO9943707-A1,
                                                                                                               02-SEP-1999.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence represents a glucagon-like peptide-I (GLP-1)
analogue, which is used in the methods of the invention. The methods
are: (i) for attenuating post-surgical catabolic changes and insulin
resistance, comprising administaring glucagon-like peptide-I (GLP-1),
GLP-1 analogue, a GLP-I derivative, or a salt of this compound: (2) for
attenuating post-surgical catabolic changes and hormonal responses to
cattenuating post-surgical catabolic changes and hormonal responses to
crivity by interacting with the same receptor (or receptors) with which
activity by interacting with the same receptors in exerting their
insulino-tropic activity, and (3) for attenuating post-surgical catabolic
changes and hormonal responses to stress, comprising administrating a
compound which enhances insulin sensitivity by interacting with the same
receptor (or receptors) with which GLP-1, GLP-1 analogues and GLP-1
capturatives interact to enhance insulin sensitivity. The processes are
cuseful for improving recovery after surgery by preventing the catabolic
reaction and insulin resistance caused by surgical trauma and
changes administration, are not disadrantages, as the
patient is usually hospitalised before surgery, and fluids are
continuously administered layer during and after surgery.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Use of glucagon-like peptide-1 and analogues and their derivatives - to attenuate post-surgical catabolic changes, insulin resistance and hormonal responses to stress
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 30;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ch 100.0%; Score 155; DB 19; 1. Similarity 100.0%; Pred. No. 1.3e-15; 30; Conservative 0; Mismatches 0;
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                                                                                                                                /note= "amidated"
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960S-0024982.
human; incretin hormone
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                                                                                              Key
Modified-site
                                    Synthetic.
Homo sapiens.
                                                                                                                                                                                                                                              26-AUG-1997;
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30-AUG-1996;
                                                                                                                                                                   W09808873-A1.
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Best Local Si
Matches 30;
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Compounds the peptide-1 (GLP-1) derivatives are disclosed which comprise residues 7-45 of GLP-1 or a fragment thereof, preferably residues 7-36 or 7-45 of GLP-1 or a fragment thereof, preferably residues 7-36, 7-37 or 7-38 or their analogues, in which (a) and residues 7-36, 7-37 or 7-38 or their analogues, in which (a) to residue a 7-36 or formation their discussion of least one amino acid and (b) the N-terminal is substituted with a group containing an optionally compounds stimulate secretion of insulin, suppress secretion of substituted 5- or 6-membered N-heterocycle, e.g. imidazoly. The compounds stimulate secretion of insulin, suppress secretion of glucagon, suppress spatric motility and/or restore glucose compliance to beta-cells. They are used to treat insulin-dependent on non-insulin-dependent diabetes mellitus, insulin resistance and obesity. They have a longer-lasting action than GLP-1 derivatives that lack the lipophilic substituent. Some of them also exist as partially structured micellerity angestes, so have improved solubility and stability. The present secure of the allowed passed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                               New N-modified peptide derivatives, useful for treating diabetes, insulin resistance and obesity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%; Score 155; DB 20; Length 30; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Glucagon-like peptide 1 (GLP-1) fragment (residues 7-36).
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/note= "C-terminal amide"
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98DK-0000263.
98DK-0000268.
98DK-0000508.
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98US-0078544.

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Goke B, Beglinger C, Coolidge TR;
                                                                                                       (BION-) BIONEBRASKA INC.
                                   19-MAR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention provides an aqueous solution that comprises: (i) at least one glucagon or glucagon-like peptide-1 (GLP-1), or their analogs or derivatives (i) and (il) at least one detergent, orther than dodecyl phosphocholine. The peptide (I) has at least two positive or negative charges or at least one charge of each sign. Glucagon is involved in glycopenolytic and gluconeogenesis processes (it also has a spasmolytic effect on smooth muscle) while GLP-1 promotes secretion of insulin and suppresses that of glucagon. The polar head of detergent interacts with charged side chains in (I) while the hydrophobic tall interacts with the hydrophobic patch in (I). The solution is used to treat (non-)insulindependent diabetes mellitus and obesity. Glucagon is also used in adoptional as pasmolytic and for treating hypodylycemia. The detergent stabilizes the solutions, which are available for immediate use and can be stored for a long time at 4-25plusoc. The solutions may have pH degradation. The detergents are made from natural materials so have better biological compatibility than known detergents. The present sympass chemical expressents a GLP-1 peptide fragment.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aqueous solution of glucagon or glucagon-like peptide-1 stabilized with charged detergent, for treating diabetes or obesity -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 30;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 100.0%; Score 155; DB 20; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 HAEGTFISDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 HABGTETSDVSSYLEGQAAKEFIAWLVKGR 30
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Misc-difference 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY39773 standard; peptide; 30 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US05571.
                                                                                               99WO-DK00115.
                                                                                                                                                                       98EP-0610006
98US-0078422
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                                                                                                                                                                                                                                                                                  (NOVO ) NOVO-NORDISK AS.
                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-551858/47.
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                                                                                                                                                                   13-MAR-1998;
18-MAR-1998;
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                                                                                               08-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                              Kaarsholm NC;
                           23-SEP-1999
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AAY3977
AAY37
AAY3
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GLP-1; Glucagon-like peptide-1; human; type I diabetes; type II diabetes;
obesity; therapy; mutein.
                                                                                               This sequence represents a glucagon-like peptide-1 sequence used in the composition of the invention. The composition is for appetite suppression, and comprises a compound binding to a GIP-1 receptor and a pharmaceutical carrier. The composition can be administered to control appetite and/or reduce spontaneous food intake in humans, especially in humans with diabetes.
                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Composition containing stabilized derivatives of glucagon-like peptide-1 with high alpha-helix content, for treating diabetes and obesity
               New composition for controlling food intake especially in diabetes sufferers -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Knudsen LB, Huusfeldt PO, Nielsen PF, Kaarsholm NC, Olsen HB;
Bjorn SE;
                                                                                                                                                                                                                                                             ó
                                                                                                                                                                                                                                  Length 30;
                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                Query Match 100.0%; Score 155; DB 20; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0;
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Misc-difference 30
//note= "optionally amidated"
                                                                                                                                                                                                                                                                                       1 HAEGTFTSDVSSYLEGGAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                           1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                          Claim 5; Page 22; 35pp; English.
WPI; 1999-561859/47.
                                                                                                                                                                                                       Sequence 30 AA;
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0
             This sequence represents a mutant of the human glucagon-like peptide-1 (GLP-1), and has a helix content (determined by circular dictrolism at 222 nm in water at 20-24 degrees C) over 25, preferably 25-50,8 at peptide concentration about 10 microM. The GLP-1 mutant can be used in a pharmaceutical composition of the invention. The compositions are used to treat diabetes (both type I and particularly type II) and/or obesity. They have better solubility and/or stability (against endogenous damainopeptidy) peptidase) than parent peptides, with lnng persistence in the plasma and retention of biological activity. They form partially structured micelle-like aggregates in solution, with the helix content NOTE: This sequence was created from the human GLP-1 sequence using information given in the specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 155; DB 20, Length 30; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels C
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                                                                                                                                                                                                                                                                                                                                                 Sequence 30 AA;
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Search completed: October 15, 2003, 10:53:05 Job time : 60.5082 secs

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Wed Ogt 15 11:41:28 2003
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800H86666666444444
800H8646966800H8645
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                                                                                                                                                       October 15, 2003, 10:51:07; Search time 19.6721 Seconds (without alignments) 64.524 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                               1 HAEGTFISDVSSYLEGGAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          328717 seqs, 42310858 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                       OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                             BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum DB seq length: 0
Maximum DB seq length; 200000000
                                                                                                                                                                                                                                                                         US-09-719-410-4
                                                                                                                                                                                                                                                                                 Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Database :
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                                                                                                                                                                           Run on:
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us-09-719-410-4.rai

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Query Match 100.0%; Score 155; DB 1; Length 30; Best Local Similarity 100.0%; Pred. No. 5.6e-16; Matches 30; Conservative 0; Mismatches 0; Indels
CORRESPONDENCE ADDRESS:
ADDRESSE: Merchant & Gould
STREET: 3100 No. 5707826west Center
CITY: Minneapolis
STAIE: MM
COUNTRY: Minneapolis
STAIE: MM
COUNTRY: UGA
ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IN PC COMPATIBLE
COMPUTER: Ploppy disk
COMPUTER: IN PC COMPATIBLE
COMPUTER: DA COMPATIBLE
COMPATIBLE OF COMPATIBLE
SPELICATION NUMBER: US 08/095,162
FILING DATE: 20-JUL-1993
ATTORNEY/AGENT INFORMATION:
NAME: Nelson, Albin J.
REGISTRATION NUMBER: 86.48.32-USOI
TELECOMOUNICATION INFORMATION:
TELECOMOUNICATION INFORMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGI: linear
MOLECULE TYPE: peptide
IMMEDIATE SOURCE:
CLONE: GLP1 7-36-NH2 (Glucagon-like Peptide)
GS-08-470-220A-1
                                                                                                                                                                                                                                                                                                                                                                                                                          PAPLICANT: Wagner, Fred W. APPLICANT: Wagner, Fred W. APPLICANT: Wagner, Fred W. APPLICANT: Wagner, Fred W. APPLICANT: Bentiage, Bruce APPLICANT: Partiage, Bruce APPLICANT: Wanning, Shane TITLE OF INVENTION: Enzymatic Method for Modification of TITLE OF INVENTION: Bookman & Court Court Court Websers & Court Court Websers & Court Court William & Court Court Websers & Court & Court Websers & Court &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match 100.0%; Score 155; DB 1; Length 30; Best Local Similarity 100.0%; Pred. No. 5.6e-16; Matches 30; Conservative 0; Mismatches 0; Indels
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Patent No. 5707826
GENERAL NIPERMATION:
APPLICANT: Wagner. Fred W.
APPLICANT: Wagner. Fred W.
APPLICANT: Bentiksen, Dennis
APPLICANT: Partridge, Bruce
APPLICANT: Partridge, Bruce
APPLICANT: Ranings, Shane
APPLICANT: Resident No. 1111E OF INVENTION: Recombinant Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 HABGTFTSDVSSYLEGGAAKEFIAWLVKGR 30
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                                                                                          Sequence 1, Application US/08095162
Patent No. 5512459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Stout, Jay
APPLICANT: Henriksen,
APPLICANT: Partidge,
APPLICANT: Manning, Sh
TITLE OF INVENTION: En
TITLE OF INVENTION: En
UNMER OF SEQUENCES: 2
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US-08-470-220A-1
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CTHER INFORMATION: The arginine residue at position 30 is modified so CTHER INFORMATION: as to replace the terminal carboxyl group with an CCHER INFORMATION: amine.

US-08-927-221-1
                                                                                                                                                                                                                                                                                                                                                                          RESULT 4
UG-08-927-227-1
; Sequence 1, Application US/08927227A
; Sequence 1, Application US/08927227A
; Sequence 1, Application US/08927227A
; GENERAL INFORMATION:
; APPLICANT: GALLOWAY, James A.
; APPLICANT: GALLOWAY, James A.
; TITLE OF INVERTION: GLUCAGON-LIKE INSULINOTROPIC PEPTIDE ANALGOGS,
; CURRENT APPLICATION WUMBER: US/08-10
; NUMBER OF SEQ. ID NO.
; SOFTWARE: PATENTIN VET. 2.0
; SEQ. ID NO.
; LENGTH: 30
; TITLE PATENTINOTROM: THE COMMON PROPERTION OF THE PATENTINOTROM PROPERTION OF THE PATENTINOTROM PROPERTION OF THE PATENTINOTROM PAT
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1 HARGIETSDVSSYLRGQAAKEFIAMLVKGR 30
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; 0

Length 30;

us-09-719-410-4.rai

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TYPE: PRT
ORGANISM: Bomo sapiens
FEATURE:
OTHER INFORMATION: The arginine residue at position 30 is modified so
OTHER INFORMATION: as to replace the terminal carboxyl group with an
US-09-348-136-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 155; DB 3; Length 30; Best Local Similarity 100.0%; Pred. No. 5.6e-16; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 155; DB 3; Length 3 Best Local Similarity 100.0%; Pred. No. 5.6e-16; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/348,136
CURRENT FILING DAME: 1999-07-06
FRIOR APPLICATION NUMBER: US 08/927,227
FRIOR PILING DAME: 1997-09-10
NUMBER OF SEQ ID NOS: 1
SEQ ID NO 1
LENGTH: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 30 amino acids
TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-961-405A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
US-08-961-405A-5
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APPLICANT: HOffmann, James A.
TITLE OF INVENTION: GLUCAGON-LIKE INSULINOTROPIC PEPTIDE ANALGOGS,
TITLE OF INVENTION: COMPOSITIONS AND METHODS
FILE REFERENCE: X-9332B
                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Hagner, Fred W.
APPLICANT: Stout, Jay
APPLICANT: Stout, Jay
APPLICANT: Henriksen, Dennis
APPLICANT: Manning, Shane
ITILE OF INVENTION: Recombinant Polypeptides
CORPORES: 26
CORRESPONDERE MAChant & Could
STREE: 3100 No. 6037143west Center
CTTY: Mineapolis
STATE: NN
COUNTRY: USA
COMPUTER: Eloppy disk
COMPUTER: IBM PC Compatible
OFFRATING STETE: Plopyy disk
COMPUTER: Eloppy disk
COMPUTER: Datentin Release #1.0, Version #1.30
COMPUTER: Datentin Release #1.0, Version #1.100
CURRENAL Release #1.00
COMPUTER: Datentin Release #1.00
COMPUTER: Dat
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Best Local Similarity 100.0%; Pred. No. 5.6e-16;
Matches 30; Conservative 0; Mismatches 0; Indels
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  1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
                              1 HARGTFTSDVSSYLEGQAAKEFIAMLVKGR 30
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US-09-348-136-1
US-09-348-136-1
; Sequence 1, Application US/09348136
; Patent No. 6133235
; GENERAL INFORMATION:
                                                                                                                          RESULT 5
US-08-967-374-1
Sequence 1, Application US/08967374
; Patent No. 6037743
; GENERAL INFORMATION:
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0; Gaps

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SESUIT 10

19-08-472-349-3

19-8equence 3, Application US/08472349

1-Patent No. 6264721

1-Patent No. 626472

1-Patent No. 62672

1-
                                                                                                                                                                                       Query Match 100.0%; Score 155; DB 3; Length 30; Best Local Similarity 100.0%; Pred. No. 5.6e-16. Matches 30; Conservative 0; Mismatches 0; Indels Matches 30; Indels
                                                                                                                                                                                                                                                                                                                          1 HABGTFTSDVSSYLEGGAAKEFIAWLVKGR 30
; LENGTH: 30
; TYPE: PRT
; ORGANISM: mammalian
US-09-302-596-4
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US-09-302-596-4
| US-09-302-596-4
| Sequence 4, Application US/09302596
| Patent No. 6284735
| GENERAL INFORMATION:
| APPLICANT: Coolidge, Thomas R. APPLICANT: Coolidge, Thomas R. APPLICANT: Explain Sequence R.W. ITLE OF INVENTION: Inschemic and Reperfused Tissue PILE REPRENCE: P03660051
| TITLE OF INVENTION: UNUBER: US/09/302,596
| UNRENT APPLICATION UNUBER: 1899-04-30 |
| PRIOR APPLICATION UNDER: 1999-10-08 |
| NUMBER OF SEQ ID NOS: 13 |
| SOTTHARE: Patentin Ver. 2.0 |
                                                                                                                                                                       DESULT 8

US-08-115-918A-5

Sequence 5, Application US/08915918A

Petent No. 627819

GENERAL INFORMATION:

APPLICATURE DE INVERTION:

TITLE OF INVERTION:

NUMBER OF SEQUENCES:

CORRESPONDENCE ADDRESS:

ADDRESSEE:

ADDRESSEE:

STREET:

MEDITAL OF INVERTION:

STREET:

ADDRESSEE:

ADDRESSEE:

STREET:

COUNTRY:

COMPUTER ELANGE ILLIAGE

COMPUTER:

COMPUTER:

MEDIDM TYPE::

APPLICATION DATA:

APPLICATION NUMBER:

COMPUTER:

APPLICATION NUMBER:

SOFTWARE:

APPLICATION NUMBER:

APPLICATION NUMBER:

APPLICATION NUMBER:

ATORNEY AGENI UNFORMATION:

TELECOMMUTCATION NUMBER:

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us-09-719-410-4.rai

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RESULT 14
US-09-975-905-1

Sequence 1, Application US/09975905

Patent No. 6388053

GRNERAL INFORMATION:

APPLICANT: Galloway, John A

TITLE OF INVENTION:

TITLE OF INVENTION: Glucagon-Like Insulinotropic Peptides, Compositions and Metha

TITLE OF INVENTION NUMBER: US/09/975,905

CURRENT PELING DATE: 2001-10-12

PRIOR FILING DATE: 2000-05-18

NUMBER OF SEQ ID NOS: 1 -0-18

SOFTWARE: Patentin version 3.1

SEQ ID NO!

LENGTH: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: MOD_RES

LCCATION: (30)...(30)

OTHER INFORMATION: The arginine residue at position 30 is modified so as to rep.
OTHER INFORMATION: the terminal carboxyl group with an amine.
US-09-975-905-1
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100.0%; Score 155; DB 4; Length 30;
Best Local Similarity 100.0%; Pred. No. 5.6e-16;
Matches 30; Conservative 0; Mismatches 0; Indels
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SAPLICANT: HOTEMATION:
APPLICANT: HOTEMATION:
APPLICANT: HOTEMATION:
APPLICANT: HOTEMATION:
CANAVARAICH
TILE NET PREVENCE:
CURRENT APPLICATION WHERE: US/09/209,799D
CURRENT APPLICATION WHERE: US/09/209,799D
CURRENT APPLICATION WHERE: US/09/209,799D
CURRENT APPLICATION NOS: 29
SOFTWARE: PATENTO NOS: 29
SOFTWARE: PATENTO NOS: 29
SOFTWARE: PATENTO NOS: 29
TENGTH: 30
TENGTH: AND 10
TENGTH: AND 10
TENGTH: PATENTO NOS: 29
CHERE THRORATION: Synthetic construct
US-09-209-799D-10
         1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
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US-09-209-799D-10
Sequence 10, Application US/09209799D
Partent No. 6380357
GENERAL INFORMATION:
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ORCANISM: Homo sapiens
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US-09-505-991-1
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                                                                                                                              Query Match 100.0%; Score 155; DB 3; Length 30; Best Local Similarity 100.0%; Pred. No. 5.6e-16; Matches 30; Conservative 0; Mismatches 0; Indels
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US-09-585-181A-4
Sequence 4, Application US/09585181A
Patent No. 635824
GENERAL INFORMATION:
APPLICANT: Hoffmann, James
TITLE OF INVENTION: GLD-1 FORMILATIONS
FILE REPERBNCE: x.11368
CURRENT APPLICATION NUMBER: US/09/585,181A
CURRENT FILING DAIE: 2001.08-22
PRIOR PHILNG DAIE: 1997-12-05
PRIOR PHILNG DAIE: 1997-12-05
PRIOR PHILNG DAIE: 1997-12-05
NUMBER: OF SEQ ID NOS: 5
SOFTWARE: PatentIn version 3.1
SOFTWARE: PatentIn version 3.1
SOFTWARE: PATENTION: GRANISH: 30
TYPE: PRT
ORGANISH: 30
TYPE: PRT
CORGANISH: 30
TYPE: PRT
CORTION: (30)...(30)
COPTER INFORMATION: AMIDATION
US-09-585-181A-4
                                                                                                                                                                                                                  1 HAEGTPISDVSSYLEGGAAKEFIAWLVKGR 30
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) POSITION IN GENOME:
CHROMOSOME/SEGMENT: N/A
MAP POSITION: N/A
US-08-472-349-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT CAGANISM: Homo sapiens US-09-333-415-4
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Query Match
100.0%; Score 155; DB 4; Length 30;
Best Local Similarity 100.0%; Pred. No. 5,6e-16;
Matches 30; Conservative 0; Mismatches 0; Indels
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Search completed: October 15, 2003, 10:57:32 Job time : 20.6721 secs

Sequence 1, Appil Sequence 17, Appil Sequence 28, Appil Sequence 3, Appil Sequence 3, Appil Sequence 3, Appil Sequence 1, Appil Sequence 1, Appil Sequence 1, Appil Sequence 1, Appil Sequence 19, Appil Sequence 19, Appil Sequence 2, Appil

US-09-876-388-2 US-09-876-388-17 US-09-876-388-27 US-09-876-388-28 US-09-817-388-3 US-09-817-388-3 US-09-817-388-3 US-09-917-38-3 US-09-918-3-10-1 US-09-918-3-10-1 US-09-918-3-10-1 US-09-918-3-10-1 US-09-918-3-10-1 US-09-918-3-10-1 US-09-918-3-10-1 US-09-918-3-10-1 US-09-918-3-10-1 US-10-918-3-1 US-10-918-3-1 US-10-818-3-1 US-10-

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* Wed-Oct 15 11:41:29 2003
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October 15, 2003, 10:55:57; Search time 42,7869 Seconds (without alignments) 112.975 Million cell updates/sec
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Copyright (c) 1993 - 2003 Compugen Ltd.
                                             US-09-719-410-4
155
1 HAEGIFTSDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                    Total number of hits satisfying chosen parameters:
                                                                           600653 segs, 161128416 residues
                    OM protein - protein search, using sw model
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Maximum Match 100%
Listing first 45 summaries
                                                              BLOSUM62
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Maximum DB seg length: 200000000
                                              Title:
Perfect score:
Sequence:
                                                              Scoring table:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result Query (Juery Day ID) Description (Juery Day) (J

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e H O	Length 30;	
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ULT 1 09-851-738-4 09-851-738-4 09-851-738-4 09-851-738-4 09-851-738-4 acent No. 0520020554601 acent No. 0520020554601 acent No. 0520020554601 APPLICANT COOLIGGE, Thomas R. APPLICANT: Coolidge, Thomas R. APPLICANT: Enlers, Mario R.W. TITLE OF INVENTION: Inschemic and Reperfused Tissue TITLE OF INVENTION: Inschemic and Reperfused Tissue CURRENT PAPPLICATION NUMBER: US/09/851,738 CURRENT PILING DATE: 2001-05-09 PRIOR REPLICATION NUMBER: 09/302,596 PRIOR PILING DATE: 1999-04-30 ROWERNEE: Patentin Ver: 2.0 ENGINEE: PRI OF SEQ ID NOS: 13 ORGANISM: mammalian	imilarity 100.0%; Score 155; DB 9; imilarity 100.0%; Pred, No. 3.2e-16; Conservative 0; Mismatches 0; HARGTYSDVSSYLEGGAAKEFIAMLYKGR 30 HARGTFTSDVSSYLEGGAAKEFIAMLYKGR 30	<u> </u>
85173 8. 7. Int 18/09 15/09 1302,	S; S S; P O; NAKEE	3055C R.
SULT 1 -09-851-738-4 -09-851-738-4 Sequence 4, Application US/09851738 Parent No. US20020055400A1 GENERAL INFORMATION: APPLICANT: Coolidge, Thomas R. APPLICANT: Coolidge, Thomas R. TITLE OF INVENTION: Metabolic Interval	100.0%; 100.0%; tive (SYLEGQAAN SYLEGQAAN	SOUR 2 Sequence 4, Application US/09805507 Seriest No. US20020098195A1 GENERAL INFORMATION: APPLICANT: COOLIDGE, THOMAS R.
SULT 1 -09-811-738-4 -09-811-738-4 Sequence 4, Application US/0 Barent No. 0520020055460A1 SEMERAL INFORMATION: SEMERAL INFORMATION: SEPLICANT: COLIDGE, Thomas APPLICANT: COLIDGE, Thomas APPLICANT: COLIDGE, Thomas TITLE OF INVENTION: Metabol CURRENT APPLICATION NUMBER: CURRENT PILING DATE: 1999-04- PRIOR FILING DATE: 1999-04- PRIOR FILING DATE: 1999-04- RUMBER: PRIOR OF SEQ ID NOS: 13 SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 4 TYPE: FRI OFGANIEM: mammalian	h. Similarity 100 30; Conservative 1 HAEGIFTSDVSSYLE 	SULF 2 -09-805-507-4 Sequence 4, Application US Patent NO USCO020098195Al GENERAL INFORMATION: APPLICANT: COOLIDGE, THOM
lcati 20055 20055 1008: 1008: 1008: 1008: 1008 1108: 1108: 1108:	arity onser FFTSI	icati 2009E ION: IDGE,
AAAPPLE S2000 S2000 CCOL CCOL END WCE: LICATION G DATE CATIO G DATE	imila; CC; CC; HAEG	4 APPL S200 S200 COOL
738- NNT: NNT: NNT: NNT: APPENDED: APPENDED: APPENDED: APPEND:	/38- tch als 30 1	507- 4, 4, 10. U INFO
VS-09-651-738-4 US-09-651-738-4 Sequence 4, Application of the control of the con	Ouery Matche Matches 30; Conserv HARGTETSD HARGTETSD HARGTETSD	RESULT 2 1G-109-805-507-4 5 Sequence 4, Applicat 5 Patent No. US2002009 7 GENERAL INFORMATION: 7 APPLICANT: COOLIDGE
US-09-6 Sequence Sequ	Oues Best Mate	RESULT 2 US-09-80; Sequen; Patent; GENERA;
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US-08-59-90-4

| Sequence 4, Application US/09859804
| Sequence 4, Application US/09859804
| Fatent No. US200201072661
| Fatent No. US200201072661
| GENERAL INFORMATION INFORMAT
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US-109-982-978-4

| US-109-982-978-4
| Sequence 4, Application US/09982978
| Patent No. US20020146405A1
| Patent No. US20020146405A1
| GENERAL INFORMATION:
| APPLICANT: ENLERS, MARIO
| TILLE OF INVENTION: PREATHENT OF ACUTE CORONARY SYNDROME WITH GLP-1
| TILLE OF INVENTION: PREATHENT OF ACUTE CORONARY SYNDROME WITH GLP-1
| CURRENT APPLICATION NUMBER: US/09/982,978
| PRIOR APPLICATION NUMBER: US/09/599,804
| PRIOR PLIKE DATE: 2001-105-18
| PRIOR APPLICATION NUMBER: 60/205,239
TITLE OF INVENTION: TREATMENT OF ACUTE CORONARY SYNDROME WITH GLP-1
FILE REFERENCE: 089187/0395
CURRENT APPLICATION NUMBER: US/09/805,507
CURRENT TILING DATE: 2001-03-14
PRIOR APPLICATION NUMBER: 09/859,804
PRIOR APPLICATION NUMBER: 09/859,804
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PATENT NOS: 13
SOFTWARE: PATENTIN Ver. 2.1
EBNGTH: 30
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FORTHER INFORMATION: Description of Unknown Organism: Mammalian GLP
COTHER INFORMATION: peptide
US-09-859-804-4
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ORGANISM: Unknown Organism
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GENERAL IN UNCARALIUM:

GENERAL IN UNCARALIUM:

TITLE OF INVENTION: USE OF GLP-1 OR ANALOGS IN TREATMENT OF MYOCARDIAL INFARCTION

FILE REFERENCE: X-1082-A

CURRENT REPERCATION WUMBER: US/09/834,229A

CURRENT FILING DATE: 2001-04-12

FRIOR APPLICATION WUMBER: US 08/915,918

PRIOR APPLICATION WUMBER: US 06/024,980

FRIOR PILING DATE: 1997-08-21

FRIOR APPLICATION WUMBER: US 06/024,980

FRIOR PILING DATE: 1996-08-30

NUMBER OF SEQ ID NOS: 6

SOFTWARE: PATENTIN OS: 6

SOFTWARE: PATENTIN OS: 6

CREATURE: ATTÍTICIAL Sequence

TYPE: PRT
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Sequence 4, Application US/09953021B

Patent No. US20020147131A1

GENERAL INFORMATION:

APPLICANT: Colidge, Thomas L.

APPLICANT: Colidge, Thomas L.

TITLE OF INVENTION: Metabolic Intervention with GLP-1 to Improve the Function of TITLE OF INVENTION: Reperfused Skeletal Muscle Tissue

FILE REFERENCE: P03660US6

CORRENT PILING DATE: 1209-10-11

PRIOR APPLICATION NUMBER: 09/302,596

PRIOR FILING DATE: 1999-04 30

SEQ ID NOS: 13

SOFTWARE: Patentin Ver. 2.0

SEQ ID NOS: 30

TENGTH: 30

TENGTH: 30
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PRIOR FILING DATE: 2000-05-19

NUMBER OF SEQ ID NOS: 13

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO .

I ENGTH: 30

TIPE: PRI .

OXCANISM: OKANISM: PRATURE:

OTHER INPORMATION: Description of Unknown Organism: Mammalian GLP

US-09-982-978-4
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                                                                                                                                                                                                                                                                                                                                          Length 30;
                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%; Score 155; DB 10;
Best Local Similarity 100.0%; Pred. No. 3.2e-16;
Matches 30; Conservative 0; Mismatches 0;
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US-09-834-229A-5
US-09-834-229A-5
Sequence 5, Application US/09834229A
; Publication No. US200202823A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
JS-09-953-021B-4
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US-09-953-021B-4
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us-09-719-410-4.rapb

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RESULT 10
US-10-122-255-1
US-10-122-255-1
Sequence 1, Application US/1012525
Sequence 1, Application No. GG20020165342A1
SERENZAL INFORMATION:
APPLICANT: Galloway, John A
APPLICANT: Galloway, John A
APPLICANT: Galloway, John A
APPLICANT: Galloway, John A
APPLICANT: Galloway
ITILE NETRIENCE: X-9332E
CURRENT APPLICATION NUMBER: US/10/125,255
CURRENT APPLICATION NUMBER: US/10/125,255
MUMBER OF SEQ ID NOS: 1
SEQ ID NO 1
IENGTH: 30
TYPE: FAT
CORGANISM: Homo sapiens
TYPE: FAT
CORGANISM: Homo sapiens
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NAME/KEY: MOD_RES
LOCATION: (30)..(30)
CTHEN INFORMATION: The arginine residue at position 30 is modified so as to rep
CTHEN INFORMATION: the terminal carboxyl group with an amine.
US-10-125-255-1
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                                            Sequence 4, Application US/10072540A
Publication No US20020123465A1
GENERAL INCORMATION
TITLE OF INVENTION: GLP-1 FORWILATIONS
FILL REPERENCE: X-11386A
GURRENT APPLICATION NUMBER: US/10/072,540A
CURRENT FILING DAIE: 2002-02-08
FRIOR PILING DAIE: 1997-12-05
NUMBER OF SEQ ID NOS: 5
SEQ ID NO 4
LIENGTH: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 HAEGIFISDVSSYLEGGAAKEFIAWLVKGR 30
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US-10-091-258-4
Sequence 4, Application US/10091258
Publication No. US20030073626a1
GENERAL INFORMATION:
APPLICANT: Hathaway, David R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
) NAME/KEY:
) LOCATION: (30)..(30)
) OTECE INFORMATION: AMIDATION
US-10-072-540A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Homo sapiens
              US-10-072-540A-4
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US-10-097-230-3

Sequence 3, Application US/10097230

Publication No. US20030186436A1

SERVEAL INFORMATION

APPLICANT: Perfetti, Riccardo

APPLICANT: Hui, Bongxiang

TILLE OF INVENTION: Guence Encoding GLP-1

TILLE PERFECT: BL176-024970.

CURRENT FILING DATE: 2002-03-12

SOFTWARE: PATENTIN OATE: 2002-03-12

SOFTWARE: PATENTIN VERSION 3.1

SEQ ID NO 3

FUNDS: NO 3

FUNDS
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                                                                                                                                          Query Match 100.0%; Score 155; DB 11; Length 30; Best Local Similarity 100.0%; Pred. No. 3.2e-16; Matches 30; Conservative 0; Mismatches 0; Indels (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 7
US-09-997-792-10
US-09-997-792-10
Sequence 10, Application US/09997792
Publication No. US200300454641
GENERAL INFORMATION:
APPLICANT: HERMELING, Ronald
APPLICANT: HARSIMHAD, James
APPLICANT: HASISIMHAD, Chakravarthy
TITLE OF INTRAINING, CLUCAGON-LIKE PEPTIDE-1 CRYSTALS
FILE REFERENCE: X-10242
CURRENT APPLICATION UNDER: US/09/997,792
CURRENT APPLICATION UNDER: US/09/997,792
CURRENT APPLICATION UNDER: 2001-11-30
NUMBER OF EXC ID NOS: 29
SOFTWARE: Patentin version 3.0
SEQ ID NO 11:30
MANNER PATENTING APPLES APPLICATION UNDER PATENTING APPLICATION UNDER PATENTING APPLICATION APPLICA
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                                                                                                                                                                                                                                                                                                                      1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
; OTHER INFORMATION: synthetic construct US-09-834-229A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: synthetic construct

US-09-997-792-10
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/ ORGANISM: Homo sapiens
US-10-097-230-3
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0; Gaps
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                                                                                                                                             Indels
                                                           Ouery Match 100.0%; Score 155; DB 15; Best Local Similarity 100.0%; Pred. No. 3.2e-16; Matches 30; Conservative 0; Mismatches 0;
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Patent No. US20010010923A1
GENERAL INFORMATION:
APPLICANT: WORTENER, UFFE
APPLICANT: OLESEN, KJELD
APPLICANT: STRANICKE, HENNING
APPLICANT: STRANICKE, HENNING
APPLICANT: BREDDAM, KLAUS
ITILE OF INVENTION: MODIFIED CARBOXYPEPTIDASE
TILE OF INVENTION: MODIFIED CARBOXYPEPTIDASE
TILE OF INVENTION: WOMER: US/09/420,785A
CURRENT FILING DATE: 1999-10-19
NUMBER OF SEQ ID NOS: 4
SOUTHARD: PATENTING PATE: 1999-10-15
SOUTHARD: PATENTING DATE: 1999-10-15
SOUTHARD: PATENTING DATE: 1999-10-15
SOUTHARD: ABBOTT TO NOS: 4
SERVICE TO NOS: 4
SERV
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US-09-754-723-1
Sequence 1. Application US/09754723
Patent No. US20010002394A1
SEMERAL INFORMATION:
APPLICANT: BERDIC. Suad
APPLICANT: GTUNIAK, MARK
TITLE OF INVENTION: Use Of A Peptide
FILE REFERENCE: 3745.234-US
CURRENT FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: US/09/754,723
CURRENT FILING DATE: 1997-06-21
PRIOR APPLICATION NUMBER: US 08/425,121
PRIOR PLILNG DATE: 1997-01-013
PRIOR PLILNG DATE: 1997-01-013
PRIOR FILING DATE: 1994-01-13
PRIOR FILING DATE: 1994-01-13
PRIOR FILING DATE: 1994-03-19
PRIOR FILING DATE: 1993-03-19
PRIOR FILING DATE: 1993-03-19
PRIOR FILING DATE: 1993-03-19
NUMBER OF SEQ ID NOS: 1
SEQ ID NO 1
MADDE: PANDER PRIOR PRIOR PRIOR PRIOR PLILATION NUMBER: DK 0363/92
PRIOR FILING DATE: 1993-03-19
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NAME/KEY: VARIANT

LOCATION: (1)...(31)

OCHER INFORMATION: Xaa ~ Any Amino Acid
U$-09-754-723-1
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ORGANISM: Homo sapiens
PEATURE:
NAME/KEY: VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo Sapien
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US-09-420-785A-3
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| Publication No. US20030124669A1
| GENERAL INFORMATION:
| APPLICANT: Pan, Clark
| APPLICANT: Whelan, James
| APPLICANT: Whelan, James
| APPLICANT: Whelan, James
| APPLICANT: Whelan, James
| TITLE OF INVENTION: Perpides Acting as Both GLP-1 Receptor Agonists and Glucagon
| TITLE OF INVENTION: Perpides Acting as Both GLP-1 Receptor Agonists and Glucagon
| TITLE OF INVENTION: Receptor Antagonists and Their Pharmacological Methods of Use
| TITLE OF INVENTION: Receptor Antagonists and Their Pharmacological Methods of Use
| TITLE OF INVENTION: Receptor Antagonists and Their Pharmacological Methods of Use
| TITLE OF INVENTION: NUMBER: US/10/265,345A
| CURRENT FILLEN DATE: 2003-01-31
| FRIOR PLICATION NUMBER: US 60/327,730
| FRIOR APPLICATION NUMBER: US 60/327,730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
US-10-055-259-4
US-10-055-259-4
Sequence 4, Application US/10055259
Sequence 4, Application US/10055259
Publication No. US20030091507A1
GENERAL INFORMATION:
APPLICANT: Wisholl, Tin
APPLICANT: Wisholl, Tin
TITLE OF INVENTION: GLD-1 AS A DIAGNOSTIC TEST TO DETERMINE Beta-CELL FUNCTION AND TH
TITLE OF INVENTION: PRESENCE OF THE CONDITION OF IGT AND TYPE-II DIABETES
FILE REFERENCE: P03987031
CURRENT APPLICATION UNGBER: US/10/055,259
CURRENT FILING DATE: 2002-06-21
NUMBER OF SEQ ID NOS: 13
SOFTHARE: Patentin version 3.1
SERGINO NOS: 30
HTLLCANT: COOLIGGE, Thomas R
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATING PERIPHERAL VASCULAR DISEASE
FILE OF INVENTE OF 12.002-03-05
CURRENT FILENCE DATE: 2002-03-05
NUMBER FILENCE DATE: 2002-03-05
NUMBER PERIOR OF 13
SOFWARE: Patentin version 3.1
SOFWARE: Patentin version 3.1
LENGTH: 30
TYPE: PRT
ORGANIZH: MARMALIAN
US-10-091-258-4
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CORGANISM: Homo sapiens
US-10-055-259-4
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CRGANISM: Homo sapiens
US-10-265-345A-2
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US-10-265-345A-2
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COTHER INFORMATION: C-terminal amino acid which serves as a leaving of OTHER INFORMATION: group, typically, an uncharged amino acid side of OTHER INFORMATION: chain, preferably alanine group, typically, an uncharged amino acid side of OTHER INFORMATION: chain, preferably alanine group. Sear. 100.785A-3

Query Match
Best Local Similarity 100.0%; Pred. No. 3.3e-16; Best Local Similarity 100.0%; Pred. No. 3.3e-16; Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps QY 1 HAEGTFISDVSXLEGGAAKEFIAMLVKGR 30

DD 1 HAEGTFISDVSXLEGGAAKEFIAMLVKGR 30

Search completed: October 15, 2003, 11:09:32
Job time: 42.7869 secs
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1 PCT - USO2 - 24141 - 4
1 PCT - USO2 - 24141 - 4
1 PCT - USO3 - 15634 - 3
1 PCT - USO3 - 1664 - 3
1 PCT - USO3 - 1664 - 4
1 PCT - USO3 - 1664 - 4
1 PCT - USO3 - 1664 - 4
3 US - 08 - 356 - 528 - 53
3 US - 08 - 356 - 530 - 27
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4 US - 08 - 206 - 601 - 18
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PCT-US02-13088-4
October 15, 2003, 10:53:17; Search time 285.738 Seconds (without alignments) 95.534 Million cell updates/sec
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| cgn2_6/ptodata/I/paa/MSG_COMB.pep:*
| cgn2_6/ptodata/I/paa/MSG_COMB.pep:*
| cgn2_6/ptodata/I/paa/MSGB_COMB.pep:*
| cgn2_6/ptodata/I/paa/WSGB_COMB.pep:*
          GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                    US-09-719-410-4
155
1 HABGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                     5728757 seqs, 909918778 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                        OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                          Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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Perfect score:
Sequence:
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Sequence 11, Appli Sequence 4, Appli Sequence 4, Appli Sequence 13, Appli Sequence 13, Appli Sequence 13, Appli Sequence 13, Appli Sequence 14, Appli Sequence 14, Appli Sequence 16, Appli Sequence 17, Appli Sequence 18, Appli Sequence 18, Appli Sequence 18, Appli Sequence 18, Appli Sequence 19, Appli Sequence 19, Appli Sequence 19, Appli Sequence 19, Appli Sequence 11, Appli Sequence 14, Appli Sequence 15, Appli Sequence 15, Appli Sequence 17, Appli

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Sequence 4, Appli
          30 1 PCT-US02-13088-4
Score Match Length DB ID
155 100.0 30 1 PCT
      Result
No. Sc
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APPLICANT: Restoragen, Inc.

TITLE OF INVENTION: MESISTANCE
TITLE OF INVENTION: RESISTANCE
TITLE OF INVENTION: RESISTANCE
TITLE OF INVENTION: RESISTANCE
TITLE OF INVENTION: RESISTANCE
TITLE REPERENCE: RGN-3
CURRENT PAPLICATION NUMBER: PCT/USO2/13088
CURRENT FILING DAIE: 2002-04-24
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PETCHIN VERSION 3.1
SEQ ID NO 4
LENGTH: 30
TYPE: PPT
CORGANISM: manmalian
PCT-USO2-13088-4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 HAEGTFTSDVSSYLEGOAAKEFIAWLVKGR 30
Sequence 4, Application PC/TUS0213088 GENERAL INFORMATION:
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PCT-US02-25227-25
Sequence 25, Application PC/TUS0225227
GENERAL INFORMATION:
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PCT-US03-16643-31
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PCT-US02-31693A-2
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FCT-USO2-2441-4
Sequence 4, Application PC/TUSO224141
Sequence 4, Application PC/TUSO224141
Sequence 4, Application PC/TUSO224141
Sequence 4, Application FCTUSO224141
Sequence 4, Application:
APPLICANT: PRE Government of the United States of America, as represented by the APPLICANT: Bean, Usephine
APPLICANT: Bean, Usephine
APPLICANT: Bolloway, Harold
TITLE APPLICANT: Holloway, Harold
TITLE OF INVENTION: GLP-1, EXBNDIN-4, AND PEPTIDE ANALOGS AND USES THEREOF
FILE REFERENCE: 14014.0396p1
CURRENT APPLICATION NUMBER: PC/US02/24141
CURRENT PLING DATE: 2002-07-30
PRIOR PPLICATION NUMBER: 60,309,076
PRIOR PPLICATION NUMBER: 60,309,076
PRIOR PPLICATION NUMBER: 60,309,076
PRIOR PPLICATION NUMBER: 60,309,076
SEQUENCE FILING DATE: 2001-07-31
NUMBER OF SEQ ID NOS: 52
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
LENGTH: 30
                                                                                                                                                                                                                                                                                                                         SERMENT INFORMATION:
SCHELL INFORMATION:
APPLICANN: The Government of the United States of America, as represented by the APPLICANN: Secretary, Department of Health and Human Services
APPLICANN: Geneig, Migel H.
APPLICANT: Greig, Migel H.
APPLICANT: By An Josephine
APPLICANT: By An Josephine
APPLICANT: By An Josephine
APPLICANT: DOYLE, Waire
APPLICANT: Holloway, Harold
TITLE OF INVENTION: GLP-1, EXENDIN-4, AND PEPTIDE ANALOGS AND USES THEREOF
TITLE PEPERBANE: 14044, 3036p1
CURRENT APPLICATION NUMBER: 607,022/24141
CURRENT APPLICATION NUMBER: 607,0309,076
FRIOR APPLICATION NUMBER: 607,0309,076
FRIOR APPLICATION NUMBER: 607,0309,076
FRIOR APPLICATION NUMBER: 607,0309,076
FRIOR FILING DATE: 2001-07-31
SOUTHWARE OF SEQ ID NOS: 52
SOUTHWARE: ReactSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 30
TYPE: PRT
TYP
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) ORGANISH: Artificial Sequence
) FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:/Note :
) OTHER INFORMATION: Synthetic Construct
PCT-US02-24141-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.0%; Pred, No. 1.3e-15;
Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 155; DB 1; Length 30; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 HAEGTFTSDVSSYLEGGAAKEFIAWLVKGR 30
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1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                         RESULT 2
PCT-US02-24141-1
; Sequence 1, Application PC/TUS0224141
; GENERAL INFORMATION:
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RESULT 4

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SCHERAL INFOURTHON:

APPLICANT: Bayer Corporation

APPLICANT: Bayer Corporation

APPLICANT: Bayer Claimont, Kevin B.

APPLICANT: Whelan, James

APPLICANT: Whelan, James

APPLICANT: Claimont, Kevin B.

TITLE OF INVENTION: Receptor Antagonists and Their Pharmacological Methods of Use

TITLE OF INVENTION: Receptor Antagonists and Their Pharmacological Methods of Use

FILE REPERRECE: MSB-7288-PCT 7002/31693A

CURRENT APPLICATION NUMBER: US 60/327,730

PRIOR FILING DATE: 2001-10-05

NUMBER OF SEQ ID NOS: 34

SOFTWARE: PATENTING PATE: 2001-10-05

SOFTWARE: PATENTING PATE: 2010-110-05

TENGTH: 30

TENGTH: 30

TENGTH: Memo sapiens

PCT-USO2-31693A-2
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APPLICANT: General Corporation
APPLICANT: Wadsworth, Samuel C.
APPLICANT: Wadsworth, Samuel C.
APPLICANT: Gregory, Richard J.
APPLICANT: Gregory, Richard J.
APPLICANT: Gregory, Richard J.
APPLICANT: Barsons, Geoffrey
TITLE OF INVENTION: Methods of Treating Diabetes and Other
TITLE OF INVENTION: Blood Sugar Disorders
TITLE OF INVENTION NUMBER: PCT/USO2/25227
CURRENT APPLICATION NUMBER: PS 60/310,982
PRIOR PILLING DATE: 2001-08-08
NUMBER OF SEQ ID NOS: 54
SOFTWARE: FRSESEQ for Windows Version 4.0
SEQ ID NO 25
LENGTH: 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT.
) GOGANISM: Artificial Sequence
) FRATURE:
PERTURE INFORMATION: Modified GLP-1 molecule; GLP-1 (7-36)
PCT-US02-2527-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.0%; Score 155; DB 1; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 HAEGIFTSDVSSYLEGQAAKEFIAMLVKGR 30
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GNNERAL INFORMATION:
APPLICANT: Wagner, F.
APPLICANT: Peng, L.
APPLICANT: Xia, U.
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us-09-719-410-4.rapm

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RESULT 9

US-07-899-073-3

US-07-899-073-3
  TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: Arg at position 30 is C-terminally amidated.
PCT-US98-25515-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 155; DB 3; Length 30; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                               Query Match 100.0%; Score 155; DB 1;
Best Local Similarity 100.0%; Pred. No. 1.3e-15;
Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                              RESULT 10
US-08-044-133-3
Sequence 3, Application US/08044133
GENERAL INFORMATION:
APPLICANT; Xim, Yesook
APPLICANT: Lambert, William J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Peng, L.
APPLICANT: Yia, U.
APPLICANT: Xia, U.
APPLICANT: Ala, U.
APPLICANT: Minquist, B.
TITLE OF INVENTION: Methods and DNA Constructs for High Yield Production of Polypepti
FILE REFERENCE: 1627, 009W01
CURRENT APPLICATION NUMBER: PCT/US03/16645
CURRENT APPLICATION NUMBER: D6 60/383,212
PRIOR PRILING DATE: 2002-05-24
NUMBER OF SEQ ID NOS: 93
SOFTMARE: PRESERVE for Windows Version 4.0
SEQ ID NO 4
LENGTH: 30
APPLICANT: Holmquist, B.

TITLE OF INVENTION: Methods and DNA Constructs for High Yield Production of Polypepti FILE REPERBUCE: 1627.01000;
CUTRENT APPLICATION NUMBER: PCT/US03/16643
CUTRENT FILING DATE: 2003-05-23
CUTRENT FILING DATE: 2003-05-24
NUMBER OF SEQ ID NOS: 148
SOFTWARE: PRACEQ FOR Windows Version 4.0
SEQ ID NO 31
LENGTH: 30
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                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 155; DB 1; Length 30; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels
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PCT-US98-25515-4
Sequence 4, Application PC/TUS9825515
SERRAL INPORATION:
APPLICANT: BOFFMAN James A.
TITLE OF INVENTION: GLP-1 FORULATIONS
FILE REFERENCE: X-11368
CURRENT APPLICATION NUMBER: PCT/US98/25515
CURRENT FILING DATE: 1998-12-02
SEALLER FILING DATE: 1997-12-05
SARLIER FILING DATE: 1997-12-05
SOFTWARE: PATENTIN NOS: 5
SOFTWARE: PATENTIN VET: 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 HAEGITTSDVSSYLEGGAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                   1 HAEGIFISDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4, Application PC/TUS0316645 GENERAL INFORMATION:
                                                                                                                                                                                                                              TYPE: PRT
OGCANISM: Unknown
FRRYURE:
OTHER INFORMATION: GLP-1(7-36),
PCT-USO3-16643-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
OGGANISM: Unknown
FERTURE:
CTHER INFORMATION: GLP-1(7-36).
PCT-GS03-16645-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
PCT-US03-16645-4
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Page 4

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......LCANT: Stout, Jay
APPLICANT: Stout, Jay
APPLICANT: Henridge, Bruce
APPLICANT: Henritsen, Dennis
APPLICANT: Holmquist, Barton
APPLICANT: Wagner, Fred
ITILE OF INVENTION: PRODUCTION OF C-TERMINAL AMIDATED PEPTIDES FROM RECOME
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 3100 Norwest
CITY: Mpls
STREET: MN
COUNTRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
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                    ADDRESSEE: Novo Nordisk of North America, Inc.
CITY: New York
CITY: New York
CONTRY: New York
CONTRY: United States of America
ZIP: 10.74-6401
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Date of America
ZIP: 10.74-6401
COMPUTER: NAFE: Floppy disk
COMPUTER: NAFE: Floppy disk
COMPUTER: NAFE: Percentin Release #1.0, Version #1.30
SOFTWART APPLICATION NAFE: D6.994
COMPUTER: D6.597
SOFTWART APPLICATION AND APA:
APPLICATION WUMBER: DK PCT/DK93/00098
FILING DATE: 18-4AR-1993
ATTORNEY/ACEVI INCOMATION:
NAME: Lambhirs, Elias J.
REGISTRATION NUMBER: 33,728
TELEPOMET: APPLICATION NUMBER: 33,728
TELEPOMET: COMPUTER: APPLICATION NUMBER: 33,728
TELEPOMET: COMPUTER: APPLICATION NUMBER: 13,728
TELEPOMET: APPLICATION NUMBER: 33,728
TELEPOMET: APPLICATION NUMBER: 33,728
TELEPOMET: APPLICATION NUMBER: 33,728
TELEPOMET: APPRICATION NUMBER: 33,728
TELEPOMET: APPLICATION NUMBER: 33,728
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SCHARE: USA
ZIE: 55402
ZURIES 5402
COMPUTER READABLE PORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOTTWARE: ReatSEO Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NOMBER: US/08/350,528
FILING DATE: 07-DEC-1994
CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
FILING DATE:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear MOLECULE TYPE: peptide US-08-302-855-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
100.0%; Score 155; DB 4; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.3e-15;
Matches 30; Conservative 0; Mismatches 0; Indels
APPLICANT: Q1, Hong
APPLICANT: Gelfand, Robert A.
APPLICANT: Geoghegan, Kiteran F.
APPLICANT: Dealoy, Dennis E.
TITLE OF INVENTION: Prolonged Delivery of Peptides
NUMBER OF SEDURNES: 7
CORRESPONDER DEDRESS: 7
CORRESPONDER DEDRESS: 7
CORRESPONDER DESS: 7
COUNTY: New York
COUNTY: Us. A.
INE 10017-575
COMPUTER READBLE FORM: New Tork
COMPUTER TEADBLE FORM: PC-DOS/NS-DOS
SOFTWARE: D10017-575
COMPUTER: IBM PC COMPATION
OPERATION SYSTEM: PC-DOS/NS-DOS
SOFTWARE: D10017-575
COMPUTER: D10017-575
C
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APPLICANT: Pridal, Lone
TITLE OF INVENTION: NOVEL MEDICAMENT
NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 11
(5-08-307-855-1
7 Sequence 1, Application US/08302855
6 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: GAILLING CALLA
STRANDEDNESS: Single
TOPCLOST: linear
MOLECULE TYPE: Peptide
HYPOTHEITCAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: N-terminal
ORIGINAL SOURCE:
ORGANISM: N/A
FRAGMENT TYPE: N/A
STRAIN: N/A
INDIVIDUAL ISOLATE: N/A
HAPLOTYPE: N/A
CELL LINE: N/A
LIBRART: N/A
LIBRART: N/A
CHROMOSOME/SEGMENT: N/A
MAP POSITION: N/A
UNITS: N/A
UNITS: N/A
UNITS: N/A
UNITS: N/A
UNITS: N/A
UNITS: N/A
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Query Match 100.0%; Score 155; DB 7; Length 30; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                            1 HAEGTFISDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: (203) 441-4901
TELEPRX: (203) 441-521
TELEPKX: (203) 441-521
INFORMATION FOR SEQ ID NO: 3:
EDNOTH: 30 amino acids
TYPE: amino acid
TYPE: amino acid
TYPE: molecular TYPE: peptide
US-08-356-231-3
  LENGTH: 30 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
MATI-SENSE: Internal
STRANMENT TYPE: internal
US-08-350-530x-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:

APPLICANT: Partidge, Bruce
APPLICANT: Stout, Jay
APPLICANT: Stout, Jay
APPLICANT: Benriksen, Dennis
APPLICANT: Menning, Shane
APPLICANT: Menning, Shane
APPLICANT: Holmquist, Barton
APPLICANT: Holmquist, Barton
APPLICANT: Menner, Fred
APPLICANT: Wagner, Fred
APPLICANT: Wagner, Production of PEPTIDE USING RECOMBINANT
TITLE OF INVENTION: 8 GOULD
STREET: 3100 Norwest Center, 90 S. 7th Street
CITY: Minneapolis
STATE: Minneapolis
COUNTRY: U.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 155, DB 7; Length 30; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 HAEGTFTSDVSSYLEGOAAKEFIAMLVKGR 30
ATTORNEY/AGENT INFORMATION:
NAME: Carter, Charles G
REGISTATION NUMBER: 35,093
REFERENCE/DOCKET NUMBER: 8648.43US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 332-5300
TELEPAX:
TELEPAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
ATORNEY/AGENT INFORMATION:
NAME: Carter, Charles G
REGISTRATION NUMBER: 35,093
REFRENCE/DOCKET NUMBER: 8648.45USOI
TELEDROMONICATION INFORMATION:
TELEPROMONICATION INFORMATION:
TELEPROME: 612/332-500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDTIM TYPE: Diskette
COMPUTER: IBM COmpatible
OPERATING SYSTEM: DOS
SOFWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION: 435
FILNG DATE: 07-DEC-1994
CLASSIFICATION: 435
PRIOR APPLICATION: A35
PRIOR APPLICATION: DATA:
APPLICATION: UNMERR:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 13
US-08-350-530A-27
; Sequence 27, Application US/08350530A
; GENERAL INFORMATION:
                                                                                                                                                                                      INPORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 amino acids
TYPE: amino acid
STRANDEDNESS: single
FOOLOGY: linear
MONECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
RAGMENT TYPE: internal
CRAGMENT TYPE: internal
GS-08-350-528-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 27: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
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GENERAL INFORMATION:
APPLICANT: Daumy, Gaston C.
APPLICANT: Daumy, Gaston O.
APPLICANT: Daumy, Gaston O.
APPLICANT: Eranoceur. Michael L.
APPLICANT: Eranoceur. Michael L.
APPLICANT: Larson, Eric R.
APPLICANT: Larson, Eric R.
APPLICANT: Larson, Eric R.
APPLICANT: Efizer Inc. (Non-US)
TITLE OF INVENTION: GENCYATIVES
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS: 6
CORRESPONDENCE ADDRESS: 6
COURTER: Bastern Point Road
CITY: Groton
STATE: CT
COURTER: Bastern POINT ROAD
AND COMPUTER: BASTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin NUMBER: US/08/356,231
FILING DATE: 15-UNI-199:
REFERENCE/DOSCET WUMBER: PCB155AGGE
TELECOMMITCATION NUMBER: PCB155AGGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 30;
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   Query Match 100.0%; Score 155; DB 9; Length 30; Best Local Similarity 100.0%; Pred. No. 1.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                     1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
Sequence 1, Application US/08520485 GENERAL INFORMATION:
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Search completed: October 15, 2003, 11:07:21 Job time : 286.738 secs

123, App 28, Repl 26, App 26, App 100, App 110, App 111, App 112, App 113, App 114, App 115, App 116, App 117, App 118, App

ALIGNMENTS

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000 Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

SUMMARIES

4	Description	Sequence 14, Appl	48	7,		Sequence 114, App		'n	16,	Sequence 34, Appl	ý	ú	Sequence 64, Appl	'n	124	7	Sequence 34, Appl	27	30,	27,	30,	Sequence 92, Appl	115	87,	112,	113,	111,
SOMMALES		PCT-US03-26778-14	PCT-US03-25818-48	PCT-US03-28093-1	US-09-341-590A-118	US-10-291-226-114	US-10-656-405-1	US-10-671-340-1	PCT-US03-15395B-16	PCT-US03-26779-34	PCT-US03-26778-6	PCT-US03-26818-6	PCT-US03-26818-64	PCT-US03-28093-2	US-10-291-226-124	US-10-656-405-2		PCT-US03-28093-27	PCT-US03-28093-30	US-10-656-405-27	US-10-656-405-30	US-09-341-590A-92	-01	US-10-291-226-87	US-10-291-226-112	US-10-291-226-113	US-10-291-226-111
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8 Query Match Icanth		30	30	30	30	30	30	30	37	31	31	31	31	31	31	31	31	32	32	32	32	36	36	30	30	30	31
S Query	110 1011	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.1	97.4	97.4	97.4	97.4
0	1000	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	152	151	151	151	151
Result		r-i	7	m	4	w	6	7	∞	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

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; FEATURE:
; OTHER INFORMATION; GLP-1-(7-36)
US-09-341-590A-118
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PCT-US03-28093-1

Sequence 1, Application PC/TUS0328093

GENERAL INFORMATION:

APPLICAMT: Bayer Planameceuticals Corporation

APPLICAMT: Bayer Planameceuticals Corporation

APPLICAMT: Wholan, James

TILE OF INVENTION: Methods of Use

FILE REFERENCE: MSS-7296

CURRENT APPLICATION NUMBER: PCT/US03/28093

CURRENT PLING DATE: 2003-09-04

PRIOR FILING DATE: 2002-09-16

PRIOR PLING DATE: 2002-09-16

PRIOR FILING DATE: 2003-09-16

PRIOR FILING DATE: 2003-09-16

PRIOR FILING DATE: 2003-09-16

FROM FILING DATE: 2003-09-16

SEQ ID NOS: 34

SEQ ID NO 1

LEARTH: 30
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(Sequence 118 Application US/09341590A)
(Sequence 118 Application US/09341590A)
(SEQUENCE 118 Application US/09341590A)
(SEGUENCE 1 INFORMATION:
(SEGUENCE INFORMATION:
(SEGUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 155; DB 1; Best Local Similarity 100.0%; Pred. No. 1.5e-14; Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 HAEGTFISDVSSYLEGQAAKEFIAWLVKGR 30
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                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: glucagon-like peptide-1
PCT-US03-26818-48
PRIOR FILING DATE: 2002-08-30
PRIOR APPLICATION UNDHER: US 10/378,094
PRIOR FILING DATE: 2003-03-04
NUMBER OF SEQ ID NOS: 90
SOFTWARE: Patentin Version 3.2
SEQ ID NO 48
LENGTH: 30
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) ORGANISM: Homo sapiens
PCT-US03-28093-1
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ORGANISM: Homo sapiens
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1 HAEGTFTSDVSSYLEGQAAKEFIAMLVKGR 30
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PCT-7603-26778-6
Sequence 6, Application PC/TUS0326778
GENERAL INFORMATION:
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APPLICANT: PERI, KRISHNA

APPLICANT: PERI, KRISHNA

APPLICANT: ABRI, KRISHNA

TILLE OF INVENTION: MODIFIED GLP-1 PEPTIDES WITH INCREASED BIOLOGICAL

TILLE OF INVENTION: MODIFIED GLP-1 PEPTIDES WITH INCREASED BIOLOGICAL

TILLE OF INVENTION: MODIFIED GLP-1 PEPTIDES WITH INCREASED BIOLOGICAL

TILLE OF INVENTION: MODIFIED GLP-1 PEPTIDES WITH INCREASED BIOLOGICAL

CURRENT FILLNG DATE: 2002-03805

CURRENT APPLICATION NUMBER: 05/413,171

PRIOR FILLNG DATE: 2002-09-25

NUMBER OF SEQ ID NOS: 1

SEQ ID NO 1

SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT ORGANISM: Artificial Sequence ORGANISM: Artificial Sequence: Synthetic CTHER INFORMATION: Peptide US-10-671-340-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 16, Application PC/TUS0315395B
Sequence 16, Application PC/TUS0315395B
GENERAL INFORMATION:
APPLICANT: Eli Lilly and Company
TITLE OF INVENTOR: MODIFIED GLUCAGON-LIKE PEPTIDE-1 ANALOGS
FILE REPERBANCE: X-15642
CURRENT APPLICANTON NUMBER: PCT/US03/15395B
CURRENT APPLICANTON NUMBER: PCT/US03/15395B
CURRENT APPLICANTON NUMBER: PCT/US03/15395B
SOFTWARE: Patentin version 3.2
SEQ ID NOS: 24
SEQ ID NOS: 24
SEQ ID NOS: 016
LENGTH: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.0%; Score 155; DB 1; Length 31; Best Local Similarity 100.0%; Pred. No. 1.6e-14; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 155; DB 6; Length 30; Best Local Similarity 100.0%; Pred. No. 1.5e-14; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 HARGTETSDVSSYLEGOAAKEFIAWLVKGR 30
0; Mismatches
                                                        1 HAEGIFTSDVSSYLEGQAAKEFIAWLVKGR 30
                                        1 HAEGTFISDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Synthetic construct PCT-US03-153958-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
PCT-US03-26779-34
; Sequence 34, Application PC/TOS0326779
                                                                                                                              RESULT 7
2-10-671-340-1
: Sequence 1, Application US/10671340
: GENERAL INFORMATION:
30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Artificial
FEATURE:
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PCT-US03-15395B-16
Matches
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GENERALI INFORMATION:
GENERALI INFORMATION:
GENERALI INFORMATION:
APPLICANT: SADEGHI, Homayoun
APPLICANT: TOWNER, Andrew J.
TITLE CANT: TOWNER, ANDREMS.
FILE REFERENCE: 54710-5006-W0
CURRENT APPLICATION NUMBER: BCT/US03/26778
CURRENT FILING DATE: 2003-06-20
PRIOR APPLICATION NUMBER: US 60/406,977
PRIOR APPLICATION NUMBER: US 60/406,977
PRIOR APPLICATION NUMBER: US 60/460,829
PRIOR APPLICATION NUMBER: US 60/460,829
PRIOR PILING DATE: 2003-04-08
PRIOR FILING DATE: 2003-04-08
SUGMERENCE FILING DATE: 2003-04-08
INDMERE OF SEQ ID NOS: 54
SOUTHWARE: PARENTH VERSION 3.2
SEQ ID NO 6
LENGHH: 31
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CCCATON: (31)..(31)

CTHER INFORMATION: Xaa can be any naturally occurring amino acid

PCT-0803-86778-6
   Length 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 155; DB 1; Length 31; Best Local Similarity 100.0%; Pred. No. 1.6e-14; Matches 30; Conservative 0; Mismatches 0; Indels
                                                          Indels
Query Match 100.0%; Score 155; DB 1; Best Local Similarity 100.0%; Pred. No. 1.6e-14; Matches 30; Conservative 0; Mismatches 0;
                                                                                                                 1 HABGTFTSDVSSYLEGOAAKEFIAWLVKGR 30
                                                                                                                                                     1 HAEGTFTSDVSSYLEGQAAKEFIAMLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRY
ORGANISM: Homo sapiens
PRACTURE:
NAME/KEY: MISC_FRATURE
OTHER INFORMATION: Glucagon-Like Peptide
FEATURE:
```

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Query Match 100.0%; Score 155; DB 1; Length 31; Best Local Similarity 100.0%; Pred. No. 1.6e-14; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                      TYPE: PRT CRGANISM: Homo sapiens PCT-US03-28093-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME, WET: misc_feature
LOCATION: (31)...(31)
OTHER INFORMATION: Xaa can be any naturally occurring amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
PCT-US03-26818-64
Sequence 64, Application PC/TUS0326818
Sequence 65, Application PC/TUS0326818
Sequence 64, Application PC/TUS0326818
Sequence 65, Application PC/TUS036818
SAPLICANT: LANCARTHED TALLANDER: AAPLICANT: LAICAT-Heai
APPLICANT: LAICAT-Heai
APPLICANT: LAICAT-Heai
SAPLICANT: MADIFIED TRANSFERRIW FUSION PROFEINS
FILE REFERENCE: 54710-5001-01-w0
COURRENT APPLICATION NUMBER: PCT/US03/26818
PRIOR PILING DATE: 2002-08-30
PRIOR FILING DATE: 2002-08-30
PRIOR FILING DATE: 2003-09-44
NUMBER OF SEQ ID NOS: 90
SOFTWARE: PatentIn Version 3.2
SEQ ID NO 64
PADE: LENGTH: 31
PADE: DATE: 2003-09-44
PADE: 2003-09-44
PAD
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100.0%; Score 155; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 1.6e-14;
Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                              APPLICANT: INTOMACHILON:
APPLICANT: INTOMACHILON:
APPLICANT: INTOMACHILON:
APPLICANT: INTOMACHILON:
APPLICANT: SADEGHI, Homayoun
APPLICANT: SADEGHI, Homayoun
APPLICANT: TUTABE OF INVENTION: MODIFIED TRANSFERRIN FUSION PROTEINS
FILE REPERANCE: 5410-5601-01-600
CURRENT APPLICATION NUMBER: US 60/406,977
PRIOR FILING DATE: 2002-08-30
PRIOR FILING DATE: 2003-09-40
PRIOR FILING DATE: 2003-09-40
PRIOR FILING DATE: 2003-09-60
SEQ ID NOS: 90
SOFTWARE: PACENTIN VERSION 3.2
SED IN NO 6
LENGHER: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEX: MISC_FERIURE
CCCATION: (37)...(37)
OTHER INPORMATION: Xaa can be Gly in GLP-1 or NH2 in GLP-2
PCT-USO3-26818-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: GLP-1(7-37) amino acid sequence
PCT-GS03-26818-64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: MISC_FEATURE
CTHER INFORMATION: Glucagon-Like Peptide
                                                                                                                                                            TI-US03-26818-6
Sequence 6, Application PC/IUS0326818
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTPE: PRT
ORGANISM: Homo sapiens
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RESULT 13
PCT-USO3-28093-2
| Sequence 2, Application PC/TUS0328093
| Sequence 2, Application PC/TUS0328093
| Sequence 2, Application PC/TUS0328093
| SENERAL INFORMATION:
| APPLICANT: Bayer Pharmaceuticals Corporation
| APPLICANT: Pan, Clark
| APPLICANT: Whelan, James
| TTLE OF INVENTION: Methods of Use
| TITLE OF INVENTION: Methods of Use
| PRIOR FILING DATE: 2003-09-04
| PRIOR FILING DATE: 2003-09-06
| WUMBER OF SEQ ID NOS: 34
| SOFTHARE: Patentin Version 3.2
| LENGTH: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 14
US-10-291-226-124

SQUENCE 124, Application US/10291226
GENERAL INFORMATION:
APPLICANT: Larsen, blars bue
APPLICANT: Mikkelsen, dens Mollgaard
APPLICANT: Mikkelsen, dens Mollgaard
APPLICANT: Mikkelsen, dens Mollgaard
APPLICANT: Weve, Soren
TITIE OF INVENTION: NOVEL PEPTIDE AGONISTS OF GLP-1 ACTIVITY
FILE ROFERENCE: 5551144487
CURRENT APPLICATION NUMBER: US/09/614,847
PRICR PILICATION NUMBER: US/09/614,847
PRICR PLILING DATE: 12000-07-12
PRICR PLILING DATE: 12000-07-12
NUMBER OF SEQ ID NOS: 153
SOFTWARE: PatentIn Ver. 2.1
SENGTH: 31
FYEE: PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 155; DB 1; Length 31; Best Local Similarity 100.0%; Pred, No. 1.6e-14; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 155; DB 6; Length 31; Best Local Similarity 100.0%; Pred. No. 1.6e-14; Matches 30; Conservative 0; Mismatches 0; Indels
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US-10-291-226-124
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1 HAEGTFISDVSSYLEGQAAKEFIAWLVKGR 30

Search completed: October 15, 2003, 11:07:58 Job time : 14.7541 secs

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October 15, 2003, 10:49:12; Search time 24.5902 Seconds (without alignments) 117.326 Million cell updates/sec
                                                                                                                                                          283308
       GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                    US-09-719-410-4
155
1 HAEGIFTSDVSSYLEGQAAKBFIAWLVKGR 30
                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                         283308 seqs, 96168682 residues
                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                        OM protein - protein search, using sw model
                                                                                                                   BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                        Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                             PIR_76:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
                                                                                     Title:
Perfect score:
Sequence:
                                                                                                                   Scoring table:
                                                                                                                                                                                                                              Database :
                                                                                                                                           Searched:
                                                        Run on:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	tion		n precursor	n precursor	n precursor	n precursor				n precursor	Proglucagon - chic	n precursor	n-like pept	:::		n - chinook	n I precurs	n precursor	n precursor			1		n - marbled	n G2 - Nort	-	- Sma	5	ı	n - North A
	Description	glucagon	glucagon	glucagon	glucagon	glucagon	glucagon	glucagon	glucagon	glucagon	progluce	glucagon	glucagon-]	glucagon-J	glucagon	glucagon	glucagon	glucagon	glucagon	glucagon	glucagon	glucagon	glucagon	glucagon	glucagon	glucagon	glucago	glacagon	glucagon	glucadon
SUMMARIES	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	GCPG	GCHU	SCGP	SCRIDU	GCRT	GCHY	GCBO	A57294	CCCE	151301	GCFGB	B61125	c61125	GCAF2	I51093	151058	GCIDC	GCGXA	GCONC	I51057	S44473	GCFIS	807211	S44472	GCAF	GCDF	544471	GCEN	SCOPV
	# !	ဗ္ဗ	ဗ	မွ	ဗ	ဗ္ဗ	ည္ပ	ပ္ပ	A5	o o	13			ဗ	9	1	2	8	8	8	H	S	8	SC	S	원	8	S	ස ප	છ
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	Length DB	158	180	180	180	18(180	180	180	151	206	10]	ĕ	30	12:	ō	178	Ġ	7	9	17	m	80	ñ	31	12	2	m	7	2
\$ Query	Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.3	92.3	83.2	81.3	81.3	77.4	76.1	76.1	75.5	74.8	72.9	72.9	71.6	66.5	62.6	61.9	61.9	61.3	9.09	60.0	58.1
	Score	155	155	155	155	155	155	155	155	143	143	129	126	126	120	118	118	117	116	113	113	111	103	97	96	96	95	94	93	96
Result	No.	Н	7	m	4	ις	9	7	00	Ġν	10	11	12	13	14	15	16	17	18	13	20	21	22	23	24	25	26	27	28	29

γ g

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Wilterson precursor - guinea pig

Wilternate names: oxpromodulin

Nicontains: glicentin-related peptide; glucagon; glucagon-37 (oxprtcomodulin); glucagon

C; Species: Oxeria porcellus (guinea pig)

C; Accession: A2486; A2349; A60323

R; Seinot. S.; Welsh, M.; Bell, G.I.; Chan, S.J.; Steiner, D.F.

FRES Lett. 203, 25-30, 1986

A; Refierence number: A24856; MUD:86248118; PMID:3755107

A; Residues: 1-180 ox SEI.

B; Huang, C.G.; Eng, J.; Pan, Y.C.E.; Hulmes, J.D.; Yalow, R.S.

Diabetes: 35, 508-512, 1986

A; Refidues pig glucagon differs from other marmalian glucagons.

A; Residues: 53-810 cHDA.

A; Residues: 53-81 cHDA.

B; Conlor, J.M.; Hansen, H.F.; Schwartz, T.W.

Regul. Pept. 11, 309-320, 1985

A; Accession: A0323; WuID:8617849; PMID:448553

B; Molecule rumber: A0323 & WID:8617849; PMID:448553

B; Molecule rumber: A0323 & WID:8617849; PMID:448553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A.Molecule type: protein
A.Rosidues: 53-81 a CORN
A.Rosidues: 53-81 a CORN
A.Rosidues: 53-81 a CORN
C.Superfamily: glucagon are completely sequenced
C.Superfamily: glucagon
C.Keyrosts: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; par
E.1-20/Domain: signal sequence #status predicted <PGC>
F.1-50/Region: glucagon #status predicted <PGC>
F.51-80/Product: glucagon astatus peptide #status predicted <GIS>
F.53-81/Product: glucagon #status experimental <GR>
F.53-81/Product: glucagon #status experimental <GR>
F.53-81/Product: glucagon-like peptide 1 #status predicted <GLI>
F.54-18/Product: glucagon-like peptide 2 #status predicted <GLI>
F.54-18/Product: glucagon-like peptide 2 #status predicted <GLI>
F.54-18/Product: glucagon-like peptide 2 #status predicted <GLI>
F.51/Modified site: amidated carboxyl end (Arg) (amide in mature form from following
     C; Superfamily: glucagon
C; Swperfamily: glucagon
C; Swperfamily: glucagon
C; Swpordsts amidated carboxyl end; carbohydrate metabolism; duplication; hormone; in
C; Stayordsts amidated carboxyl end; carbohydrate metabolism; duplication; hormone; in
F; 11-180/Product: proglucagon #status experimental <PGC>
F; 21-189/Product: glicentin related polypeptiled #status predicted <GRPP>
F; 51-50/Product: glicentin-related polypeptiled #status predicted <GRPP>
F; 52-89/Product: glicentin-related polypeptiled #status predicted <GRPP>
F; 52-81/Product: glicagon #status experimental <CKNN
F; 52-81/Product: glucagon = status experimental <KNPGP>
F; 92-173/Product: glucagon-like peptide 1 #status experimental <GLI>F; 92-173/Product: glucagon-like peptide 2 #status predicted <GLI>F; 94-173/Product: glucagon-like peptide 2 #status predicted <GLI>F; 94-177/Modified site: amidated carboxyl end (Arg) (amide in mature form from followin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 155; DB 1; Length 180; Best Local Similarity 100.0%; Pred. No. 6.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 180;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ke peptide 1 (tGLP1)
C. Species: Hono sapiens (man)
C. Species: A-Arr-1894 *sequence_revision 31-Mar-1993 *text_change 08-Dec-2000
C. Accession: A24377; A44197; A32614; A01541; S23309
C. Accession: A24377
R.White, J. W.; Sanderse, G. F.
Nucleic Acids Res. 14, 4719-4730, 1986
A.fillie: Structure of the human glucagon gene.
A. Reference number: A24377
A. Mocession: A2437
A. Mocession: A2437
A. Mocession: A2437
A. Mocession: A2437
A. Mocession: A24377
A. Mocession: A24477
A. Mocession: A24477
A. Mocession: A24477
A. Mocession: A244
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*Ryfregitar, A.; Takamoto, 691-695, 1992

**Ryfritle: C-terminal Sequencing of protein. A novel partial acid hydrolysis and analysis A; Reference number: $23188; MVID:92298996; PMID:1606956

**Rocession: $23309

**Anolacule type: protein

**Residues: 53-81 <TSU>

**Comment: In pancreatic alpha-cells, proglucagon is processed to glicentin-related polystinal in cells, proglucagon is processed to truncated glucagon-like peptide 1, glucagon-like peptide 1, glucagon-like peptide 1, glucagon-like peptide 1, glucagon-
F:126-158/Product: glucagon-like peptide 2 #status experimental <G12> F:107/Wodified site: amidated carboxyl end (Arg) (amide in mature form from following gl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                glucagon precursor [validated] - human
N)Contains: glicentin; glicentin-related polypeptide (GRPP); glucagon; glucagon-like pep
                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                 Query Match 100.0%; Score 155; DB 1; Length 158; Best Local Similarity 100.0%; Pred. No. 5.5e-15; Matches 30; Conservative 0; Mismatches 0; Indels (
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Residues: 98-127 Conso.
Thomson, J.; Kristiansen, K.; Brunfeldt, K.; Sundby, F.
BS Lett. 21, 315-319, 1972
Iftle: The amino acid sequence of human glucagon.
Reference number: A91373
                                                                                                                                                                                                                                                                                                                                                                                              1 HAEGIFISDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Genetics:
A;Gene: GDB:GCG
A;Cross-references: GDB:119265; CMIM:138030
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A;Introns: 31/2; 85/2; 131/2; 179/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Molecule type: protein
Residues: 53-81 <THO>
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GCHU
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Length 180;

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glucagon precursor - bovine

N:Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-l
N:Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-l
C; Species: Box primigenius taurus (catte)
C; Date: 14-Nov-1983 #sequence_revision 14-Nov-1983 #text_change 20-Nar-1998
C; Accession; A93970, A32081; A0158
R; Lopez, L.C.; Erazier, M.L.; Su, C.J.; Kumar, A.; Saunders, G.F.
Proc. Natl. Acad. Sci. U.S.A. 80, 5485-5489, 1983
A; Title: Mammallan panorrettic preproglucagon contains three glucagon-related peptide
A; Reference number: A93970; MUID: 81299996; PMID: 6577439
A; Reference number: A93970; MUID: 81299996; PMID: 6577438
A; Residues: 1-180 < LOP>
A; References: EMEL: KO0107
R; Bromer, W.W.; Buccher, M.E.; Koffenberger Jr., J.B.
J. Blod. Chem. 246, 2822-2827, 1971
A; Title: Anino acid sequence of bovine glucagon.
A; Reference number: A92081; MUID: 71166445; PMID: 5102927
A; Accession: A92081
A; Residues: 53-81 CSRO>
C; Superfamily: glucagon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nature Hanster preproglucagon contains the sequence of glucagon and two related pt A,Fiftle: Hanster preproglucagon contains the sequence of glucagon and two related pt A,Feference number: A01539; MUID:83167563; PMID:6835407
A,Recessions: A01539
A,Recessions: 1-180 ABER:
A,Ressidues: 1-180 ABER:
A,Ressidues: 1-180 ABER:
C,Seperiamily: glucagon
C,Seperiamily: glucagon
C,Seperiamily: glucagon
C,Seperiamily: glucagon
C,Seperiamily: glucagon
C,Seperiamily: signal sequence fstatus predicted AGG>
F;21-180/Product: proglucagon fstatus predicted AGG>
F;21-180/Product: glucagon fstatus predicted AGGN>
F;32-180/Product: glucagon-like peptide 1 fstatus predicted AGL>
F;31-180/Product: glucagon-like peptide 2 fstatus predicted AGL>
F;31-37/Modified site: amidated carboxyl end (Arg) (amide in mature form from followir
F;21-180/Product: proglucagon #status predicted <PGC>
F;21-50/Region: glicentin-related peptide #status predicted
5:35-81/Product: glucagon #status predicted <GGN>
F;38-127/Product: glucagon-like peptide 1 #status predicted <GLI>
F;46-180/Product: glucagon-like peptide 2 #status predicted <GLI>
F;46-180/Product: glucagon-like peptide 2 #status predicted <GLI>
F;127/Wodified site: amidated carboxyl end (Arg) (amide in mature form followir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       glucagon precursor - golden hamster

N:Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-]

C;Species: Mesocricetus auratus (golden hamster)

C;Date: 13-Jun-1983 *sequence_revision 13-Jun-1983 *text_change 20-Mar-1998

C;Cocssion: A0139

R;Bell, G;I.; Santerre, R.F.; Mullenbach, G.T.

Nature 302, 716-718, 1983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 155; DB 1; Length 180; Best Local Similarity 100.0%; Pred. No. 6.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 155; DB 1; Best Local Similarity 100.0%; Pred. No. 6.3e-15; Matches 30; Conservative 0; Mismatches 0;
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GLUGAGON PRECURSOR - rat

N'CONTAINS: Glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-like

C;Specias: Rattus norvegicus (Norway zat).

C;Date: 30-Sep-1987 #sequence_revision 30-Sep-1987 #text_change 26-Feb-1999

C;Accession: A22655; A22190; A44198

R; Heinrich, G.; Gros, P.; Habener, J.F.

J. Biol. Chem. 259, 14082-14087, 1984

A;Accession: A22655; MUID: 85054853; PMID: 6094339

A;Accession: A22655

A;Accession: A22655; MUID: 85054853; PMID: 6094339

A;Accession: A22655

A;Accession: A22655

A;Accession: A22655

A;Accession: A22655

A;Accession: A22655

A;Accession: A22655

A;Accession: A22656

A;Accession: A22659

A;Accession: A25190; MUID: 86304324; PMID: 3528148

A;Acterence number: A25190; MUID: 86304324; PMID: 3528148

A;Accession: A25190

A;Acterence number: A25190; MUID: 86304324; PMID: 3528148

A;Acterence number: A25190; MUID: 86304324; PMID: 3528148

A;Reterence number: A25190; MUID: 86304324; PMID: 3528148

A;Reterence number: A25190; MUID: 86304324; PMID: 858051023; PMID: 858051023; PMID: 648696

A;Reference number: A44198; MUID: 88051023; PMID: 6548696

A;Reference number: A44198; MUID: 85051023; PMID: 6548696
                                                                                                                                                                                                                                                                                                                                                           C. Accession: 03618
R. Mishi, M.; Steiner. D.F.
R. Mishi, M.; Steiner. D.F.
Mol. Endocrinol. 4, 1197-1198, 1990
A.Title: Cloning of complementary DNAs encoding islet amyloid polypeptide, insulin, and A. Rickrence number: 336118; MUD:9115592; PMID:2293024
A. Micheule type: mRNA
A. Recession: C16118
A. Molecule type: mRNA
A. Residues: 1-180 < MISA
A. Recession: C16118
A. Molecule type: mRNA
A. Repidues of WISA
A. Reperfamily: glucagon
C. Superfamily: glucagon
C. Superfamily: glucagon #fstatus predicted < SIG>
F) 21-180/Product: proglucagon #fstatus predicted < SIG>
F) 21-180/Product: glucagon-like peptide * status predicted < GLI>
F) 321-70/Reduct: glucagon-like peptide 1 * status predicted < GLI>
F) 347/Product: glucagon-like peptide 2 * status predicted < GLI>
F) 348-177/Product: glucagon-like peptide 1 * status predicted < GLI>
F) 346-178/Product: glucagon-like peptide 2 * status predicted < GLI>
F) 346-178/Product: glucagon-like peptide 2 * status predicted < GLI>
F) 346-178/Product: glucagon-like peptide 2 * status predicted < GLI>
F) 346-178/Product: glucagon-like peptide 3 * status predicted < GLI>
F) 346-178/Product: glucagon-like peptide 3 * status predicted < GLI>
F) 346-178/Product: glucagon-like peptide 3 * status predicted < GLI>
F) 346-178/Product: glucagon-like peptide 3 * status predicted < GLI>
F) 346-178/Product: glucagon-like peptide 3 * status predicted < GLI>
F) 346-178/Product: glucagon-like peptide 3 * status predicted < GLI>
F) 346-178/Product: glucagon-like peptide 3 * status predicted < GLI>
F) 346-178/Product: glucagon-like peptide 3 * status predicted < GLI>
F) 346-178/Product: glucagon-like 3 * status predicted < GLI>
F) 346-178/Product 5 * glucagon-like 3 * status predicted < GLI>
F) 346-178/Product 5 * glucagon-like 3 * status predicted < GLI>
F) 346-178/Product 5 * glucagon-like 3 * status predicted < GLI>
F) 346-178/Product 5 * glucagon-like 3 * status predicted < GLI>
F) 346-178/Product 5 * glucagon-like 3 * status predicted < GLI>
F) 346-178/Product 5 * glucagon-like 3 * status 
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C;Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; pancre
F;1-20/Domain: signal sequence #status predicted <SIG>
                                                                                                                                                                  glucagon precursor - degu
N:Contalus: glicontin-ratated peptide, glucagon, glucagon-like peptide 1: glucagon-like
C:Species: Octodon degus (degu)
C:Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 18-Jun-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 100.0%; Score 155; DB 1; Length 180; Best Local Similarity 100.0%; Pred. No. 6.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels
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A. Cross.references: GB:K02809; GB:K02810; GB:K02811; GB:K02812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98 HAEGTFTSDVSSYLEGQAAKEFIAMLVKGR 127
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A, Introns: 31/2; 85/2; 131/2; 179/2
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Glucagon precursor - bullfrog (fragments)

N.Alternate names: oxyntomodulin
N.Alternate names: oxyntomodulin
N.Alternate names: oxyntomodulin
N.Alternate names: oxyntomodulin; glucagon-like peptide 1; glucagon:
C.Species: Rana catesbelana (bullfrog)
C.Date: 31-Mar-1993 #sequence_ravision 31-Mar-1993 #text_change 20-Mar-1998
C.Accession: B28091; C28091
D.B.O.L Chen. 263, 9746-9751, 1988
A.Fitle: Isolation of peptide hormones from the pancreas of the bullfrog (Rana cates)
A.Reference number: A92730; MUID:88257102; PMID:3260236
A.Recession: B28091
A.Molecule type: protein
A.Recession: C28091
A.Molecule type: protein
A.Recession: C28091
A.Molecule type: protein
A.Recession: D28091
A.Molecule type: protein
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Cispecias: Callus gallus (chicken)
Cispecias: Tissep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
Cistoresion: Tisl30
A:Title: Trout and chicken proglucagon: alternative splicing generates mRNA transcrip A:Accession: Isl30
A:Accession: Isl30
A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Residues: 1-206 CIRN>
A:Cross-references: Gals:S78477; NID:9999386; PIDN:AAB34506.1; PID:9999387
C:Superfamily: glucagon
C:Superfamily: glucagon
C:Keywords: duplication
      A; Molecule type: protein
A; Residues: 66-101 cP03>
C; Superfamily: qlucagon
C; Superfamily: qlucagon = 05 (05 vperfamily: qlucagon = 05 vperfamily: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 92.3%; Score 143; DB 1; Length 151; Best Local Similarity 86.7%; Pred. No. 2.8e-13; Matches 26; Conservative 3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 92.3%; Score 143; DB 2; Length 206; Best Local Similarity 86.7%; Pred. No. 4e-13; Matches 26; Conservative 3; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 HAEGIFTSDVSSYLEGOAAKEFIAWLVKGR 30
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151301
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Gispeciaes: Mus musculus (house mouse)
Gispeciaes: Mus musculus (house mouse)
Gispeciaes: Mus musculus (house mouse)
Gispeciaes: Ol-Dec-1995 #seaguence_revision 01-Dec-1995 #text_change 16-Jul-1999
Gispeciaes: Miscolaes: Misco
C; Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; pancre F;1.20/Domain: signal sequence #status predicted <5165 F;21-180/Product: proglucagon *status predicted <920. F;21-180/Product: proglucagon *status predicted <920. F;21-50/Region: qilcentin-related peptide #status predicted F;53-81/Product: glucagon *status experimental <GCN> F;38-127/Product: glucagon-like peptide 1 #status experimental <GL> F;187-Roduct: glucagon-like peptide 2 #status predicted <GL2> F;127/Modified site: amidated carboxyl end <Arg) (amide in mature form from following ql
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              glucagon precursor - chicken By Contains: glucagon; glucagon-like peptide 1 By Contains: glucagon; glucagon-like peptide 1 C; Species: Gallus gallus (chicken) C; Species: Gallus gallus (chicken) C; Species: 31-pec-1991 #secension: 51-pec-1991 #secension: 509992; A92189; A60836; A01542 By Hassegawa, S: Terazono, K: Nata, K: Takada, T: Yamamoto, H: Okamoto, H. FEBS Lett. 264, 117-120, 1990 A: Transion of chicken glucagon precursor cDNA. Chicken physecense number: 509992; MUD: 90249492; PMID: 2338135
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A;Molecule type: mRNA
A;Residues: 1-180 < ROT>
A;Residues: 1-180 < ROT>
C;Superfamily: glucagon
C;Superfamily: glucagon
C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas
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A; Residues: 1:151 cHAS>
A; Cross-references: EMBL: MOT539; NID:963749; PIDN:CAA68827.1; PID:963750
R; Pollock, H.G.; Kimmel, J.R.
J. Biol. Chem. 250, 9377-9380, 1975
A; Title: Chicken glucagon. Isolation and amino acid sequence studies.
A; Afference number: A92189; MUID:76069271; PMID:1194290
A; Accession: A92189
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.0%; Score 155; DB 1; Length 1B Best Local Similarity 100.0%; Pred. no. 6.3e-15; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98 HAEGTETSDVSSYLEGQAAKEFIAMLVKGR 127
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Gaps

us-09-719-410-4.rpr

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Gludagon - chinook salmon (fragment)
Cispecies: Onocrhynchus tschawytscha (chinook salmon)
Cispecies: Onocrhynchus tschawytscha (chinook salmon)
Cispecies: Onocrhynchus tschawytscha (chinook salmon)
Cince: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jui-1999
Cincession: 151093
Rilmin, D.M.; Wongd.
Mol. Endocrinol. 9, 267-277, 1995
A;Title: Trout and chicken proglucagon: alternative splicing generates mRNA transcripareterence number: A55895; MUID:95295739; PMID:7776976
A;Accession: 151093
A;Settus: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-66 A:RNA
A;Rolecule type: mRNA
A;Rolecule type: mRNA
A;Rolecule type: mRNA
A;Rolecule type: mRNA
Cispeciminary; glucagon
C;Superfamily; glucagon
C;Superfamily: glucagon
                                                                                                                                                                                                               A; Xesdudus: 1.1-2 CLUOR

A; Xesdudus: 1.1-2 CLUOR

A; CETOSS references: (88:700933; NID:964021; PIDN:CRA23905.1; PID:964022

C; Superfamily: glucagon

C; Superfamily: glucagon

F; 1-21/Domain: signal sequence #status predicted <81G>

F; 1-21/Domain: signal sequence #status predicted <81G>

F; 22-122/Product: proglucagon 2 #status predicted <8GCN>

F; 52-80/Product: glucagon #status predicted <GCN>

F; 89-119/Product: glucagon-1ike peptide 1 #status predicted <GLI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 77.4%; Score 120; DB 1; Length 122; Best Local Similarity 70.0%; Pred. No. 4.8e-10; Matches 21; Conservative 6; Mismatches 3; Indels
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      A;Reference number: A05150; MUID:83135785; PMID:6338015
A;Accession: A05150
A:Molecule type: mRNA
A;RestAdues: 1-122 < CDNA
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Job time : 24.5902 secs
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IS1093
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Nicontains: glucagon: Julcagon-like peptide 1
C:Species: Lophius americanus (American goosefish)
C;Decies: 1.0phius americanus (American goosefish)
C;Date: 31-Mar-1993 #sequence.revision 31-Mar-1993 #text_change 21-Jul-2000
C;Accession: A05150
R:Lund, P.X.; Goodman, R.H.; Montminy, M.R.; Dee, P.C.; Habener, J.F.
J. Biol. Cham. 258, 3280-3284, 1983
A;Title: Anglerfish islet pre-proglucagon II. Nucleotide and corresponding amino acid se
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GUARGON-Like peptide - Buropean eel

C;Species: Anguilla anguilla (European eel)

C;Species: Anguilla anguilla (European eel)

C;Accession: C61125

R;Conlon, J.M.; Andrews, P.C.; Thim, L.; Moon, T.W.

GA. Comp. Endocrinol. 82, 23-32, 1991

A;Title: The primary structure of glucagon-like peptide but not insulin has been conservance number: A61125; Mudo: 91340068; PMID:1874385

A;Accession: C61125

A;Accession: C6125

A;Accession: C6125

A;Accession: C6125

A;Accession: C6125

A;Accession: Gilles

A;Reference number: A61125; Mudo: 91340068; PMID:1874385

A;Accession: C6125

A;Accession: Gilles

A;Reference number: A61125

A;Accession: Gilles

A;Accessi
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glucagon-like peptide - American eel
C;Species: Anguilla rostrata (American eel)
C;Species: Anguilla rostrata (American eel)
C;Species: Anguilla rostrata (American eel)
C;Accession: B61125
R;Conlon, J.M.; Andrews, P.C.; Thim, L.; Moon, T.W.
C;Accession: B61125
R;Conlon, J.M.; Andrews, P.C.; Thim, L.; Moon, T.W.
A;Reference number: A61125; MUD:91340068; PMID:1874385
A;Accession: B61125
A;Accessio
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Query Match 83.2%; Score 129; DB 1; Length 101; Best Local Similarity 76.7%; Pred. No. 2e-11; Matches 23; Conservative 5; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 81.3%; Score 126; DB 2; Length 30; Best Local Similarity 76.7%; Pred. No. 1.4e-11; Matches 23; Conservative 4; Mismatches 3; Indels
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GCAF2
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B61125
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CLUC_CHIBR
EXE4_HELSO
CLUC_ELAFE
EXE3_HELHO
CLUC_AMICA
CLUC_EPETWA
CLUC_HECO
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       October 15, 2003, 10:35:56; Search time 13.2787 Seconds (without alignments) 106.246 Million cell updates/sec
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Copyright (c) 1993 - 2003 Compugen Ltd.
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1 HAEGIFTSDVSSYLEGQAAKBFIAWLVKGR 30
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Maximum Match 100%
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Gapop 10.0 , Gapext 0.5
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STEAMATE

	Description	ß		-	P01275 homo sapien	P01273 mesocricetu				_			anguilla		P04092 lophius ame		~			449 oncorhynchu	027 oreochromis		•••					P13189 callorhynch	108 didelphis m			50	f canis	276 anas platyr
	Des	P01274	F01	50d	POI	104	P55	P22890	P06	P01	01295	P15	. P41	042	P04	042	P04	P0956	P8188(P0744	P8102	P79	60d	d60	P09	P01	P09	P13	PI8	d60	P25	184	P297	P0127
SUMMARIES	a	GLUC_PIG	GLUC_BOVIN	GLUC_CAVPO	GLUC_HUMAN	GLUC_MESAU	GLUC_MOUSE	GLUC_OCIDE	GLUC_RAT	GLUC_CHICK	GLUC_HELSU	GLUC_RANCA	GLUM_ANGAN	GLU1_XENLA	GLU2_LOPAM	GLU2_XENLA	GLUC_ICTPU	GLUC_LEPSP	GLUC_PIAME	GLUC_ONCKI	GLU2_ORENI	GLUC_CARAU	GLUC_MYOSC	GLU1_PETMA	GLUC_TORMA	GLU1_LOPAM	GLUC_SCYCA	GLUC_CALMI	GLUC_DIDMA	GLUC_LAMFL	GLUC_RABIT	GLU1_ORENI	GLUC_CANFA	GLUC_ANAPL
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180 AA;
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-i- FUNCTION: GLP2 STIMULATES INTESTINAL GROWTH AND UPREGULATES VILLUS HEIGHT IN THE SMALL INTESTINE, CONCOMITANP WITH INCREASED CRYPT CELL PROLIFERATION AND DECREASED ENTESCOTE ADOPTOSIS.

-i- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLATS OF LANGERHANS IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

-i- SIGNIAMAN SEDÜRNCE.

-i- SIMILARITY: BELONGS TO THE GLUCAGON PAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENGUENCE FROM N.A.
MEDINTR-8329996; PubMed-6577439,
LOCAPEZ L.C., Frazier M.L., Su C.-J., Kumar A., Saunders G.F.;
Mammalian pencreatic preproglucagon contains three glucagon-related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
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P01372;
21-JUL-1996 (Rel. 01, Created)
13-AGG-1997 (Rel. 05, Last sequence update)
28-FBR-2003 (Rel. 41, Last annotation update)
91-cason precursor [Contains: Glicentin-related polypeptide (GRPP);
Glucagon; Glucagon-like peptide I (GLPI); Glucagon-like peptide 2
(GLP2)].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bos taurus (Bovine).
Bukaryota; Metazoa: Chordata; Craniata; Vertebrata; Euteleostomi;
Manmalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
NCBL_TaxID=9913;
                                                                                                                                                                               PDB: IGCN: 30.5EP-83.
InterPro; IPRO00521; Gludagon.
Pfan: PFO0123; hormone2; 3.
SWART; SMO0070; GLUCA; 3.
PROSTER; PS00260; GLUCAGON; 3.
BLUGAGOM family; Hormone; Cleavage on pair of basic residues; 3D-structure.
I 69 GLICENTIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 100.0%; Score 155; DB 1; Length 158; 1. Similarity 100.0%; Pred. No. 5.5e-15; 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                  GLICENTIN.
GLICENTIN-RELATED POLYPEPTIDE.
GLICAGON-GRANDE 1.
GLICAGON-LIKE PEPTIDE 1.
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158 AA; 18212 MW; 28C6FCF257F333B2 CRC64;
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MEDINUE-71166445; PubMed=5102927;
Bronner W.W., Boucher M.E., Koffenberger J.E. Jr.;
Bronner Gid sequence of bovine glucagon.";
J. Biol. Chem. 246:2822-2827(1971).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peptides.";
Proc. Natl. Acad. Sci. U.S.A. 80:5485-5489(1983).
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GLUC_BOVIN
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| EMBL; K00107; AAA30538.1; -...
| DR | PUB; 1XK6; 13-PEB-02. |
| PUB; 1XK6; 13-PEB-02. |
| PUB; 1XK6; 13-PEB-02. |
| PUB; 1XK6; 13-PEB-03. |
| PUB; 1XK0; 13-PEB-03. |
| PUB; 12-PEB-03. |
| PUB; 13-PEB-03. |
| PUB; 14-PEB-03. |

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SEQUENCE OF 53-81.
MEDLINE-86165412; PubMed-3956884;
Huang C.G., Eng J., Pan X.-C.E., Bulmes J.D., Yalow R.S.;
"Guinea pig glucagon differs from other mammalian glucagons.";
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20944 MW; 8D9B4FF05B9F15FF CRC64;
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RL Diabetes 35:508-512(1986).

RN [3]

RPARTIAL SEQUENCE OF 53-89.

RA MEDLINE-86017849; PubMed-4048553;

RA COLON J.M., Bansen H.F., Schwartz T.W.;

COLON J.M., Bansen H.F., Schwartz T.W.;

COLON J.M., Bansen H.F., Schwartz T.W.;

RL SA COLON J.M., Bansen H.F., Schwartz T.W.;

RL SALSSE THE SLOCAGON PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND COLON STRAIN BLOOD SUGAR LEVEL ON COLON THE SALLS FRIE SLOCAGON PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND FRIESPEN BENCON SURPAR WITH INTERFACE COLON THE SALLS INTESTINE, CONCOUNTANT WITH INCREASED CRYPT CELL PROLIFERATION AND DECREASED ENTERCOYER APOPTOSIS.

-1 FUNCTION: FRODCED IN THE A CELLS OF THE ISLETS OF LANGERHANS IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

-1 STMILARITY: BELONGS TO THE GLICAGON FAMILY.

CHASTOR SWISS-IRCI ENTITUTE OF STRAILS OF THE ISLETS OF LANGERHANS IN STRAILS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the Emel on Istation of the European Bioinformatics in stitute. There are no restrictions on its modified and this statement is not removed. Usage by and for commercial containing requirement (See http://www.isb-sib.ch/announce/correspond to the Commercial containing and the statement (See http://www.isb-sib.ch/announce/correspond to the Commercial containing to licenseeisb-sib-sib.ch.)
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BRIS, A24856; GCGP.

BRIS, A24856; GCGP.

BRIST, A24856; GCGP.

BRIST, A24856; GCGP.

BRIST, A24856; GCGP.

BRIST, B200123; Glucagon.

BRINTS; PRO0725; Glucagon.

BROSTIE; PS00256; GLUCAGON.

BROSTIE; PS00260; GLUCAGON.

BROSTIE; PSPTIDE 21 50 GLICENTIN-RELATED POLYPEPTIDE.

FT PSPTIDE 53 89 GLUCAGON.

FT PSPTIDE 53 89 GLUCAGON.

BROSTIE; PSPTIDE 13 143 GLUCAGON-LIKE PSPTIDE 1.

FT PSPTIDE 131 143 GLUCAGON-LIKE PSPTIDE 2.

FT PSPTIDE 146 178 GLUCAGON-LIKE PSPTIDE 2.

FT PSPTIDE 146 178 GLUCAGON-LIKE PSPTIDE 2.

FT PSPTIDE 146 178 GLUCAGON-LIKE PSPTIDE 2.
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GLUC_HUMAN

DL GLUC_HUMAN

STANDARD, PRT; 180 AA.

DT 21-UDL-1986 (Rel. 01, Created)

DT 21-UDL-1986 (Rel. 42, Last sequence update)

DT 15-SEP-2003 (Rel. 42, Last annotation update)

DE GLUCAGON PRECURSOR [Contains: Glicentin-related polypeptide (GRPP);

DE GLUCAGON PRECURSOR [Contains: Glicentin-related polypeptide 2

DE GLUCAGON PRECURSOR [Contains: Glicentin-related polypeptide 2

GLICP]):

GN GGG.

ON GRIT-TARID-806 (Human).

ON PRANTO-1066;

RM TI]

RP SEQUENCE FROM N.A.

RX MEDLINE-88330860; PubMed-2901414;

RA MEDLINE-88330860; PubMed-2901414;

RA MEDLINE-88330860; PubMed-2901414;

RA DELOGEN D.J., Asa S.;

RI "Glucagon gene expression in vertebrate brain.";

RL. J. Biol. Chem. 263:13475-13478(1988).
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100.0%; Pred. No. 6.3e-15;
tive 0; Mismatches 0; Indels 0; Gaps
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es 30; Conservative
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ALISES THE BLOOD SUGGER LEVEL.

C. TAURCHION; GALCA SINGLARES INTESTIBLE GROWTH AND UPERGULARES VILLUS HEIGHT IN THE SHALL INTESTIBLE, CONCOMITANT WITH INCREASED CRYPT CELL PROLIFERATION HE SOURCES.

C. INDUCTION: PRODUCED IN THE A CELLS OF THE ISLERS OF IARGERHANS IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

C. INDUCTION: PRODUCED IN THE A CELLS OF THE ISLERS OF IARGERHANS IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

C. INDUCTION: PROJUCED IN THE A CELLS OF THE ISLERS OF IARGERHANS IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

C. INTRACTOR TO A DROP IN BLOOD SUGAR CONCENTRATION.

C. INTRACTOR TO THE CIUCAGON FAMILY.

C. SIMILARITY: BELONGS TO THE CIUCAGON FAMILY.

C. DATABASE: NAME-SILVANT AND STATEMENT ON BELONGS OF THE CIUCAGON FAMILY.

NOTE-CLINICAL INFORMATION OF SILVANT AND STATEMENT OF CONFECTION OF SILVANT AND STATEMENT.
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MEDLINB-98334683; PubMed-9667960;
Sturm N.S., Lin Y., Burley S.K., Krstenansky J.L., Ahn J.M.,
Azizach B.Y., Trivedi D., Hruby V.J.;
"Structure-function studies on positions 17, 18, and 21 replacement analogues of glucagon: the importance of charged residues and salt bridges in glucagon shological activity.";
bridges in glucagon bloogical activity.";
J. Med. Chem. 41.2693-2700(1998).
-!- FUNCTION: GLUCAGON PROWERS HYDROLYSIS OF GLICOGEN AND LIPIDS, AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-83271477; PubMed-6877358;
Bell G.I., Sanchez-Pescador R., Laybourn P.J., Najarian R.C.;
Exon duplication and divergence in the human preproglucagon gene.";
Nature 304:386-371(1983).
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SEQUENCE OF 98-127.

MEDLINE-89337238; PubMed=2753890;

Orskov C., Bersani M., Johnsen A.H., Hoejrup P., Holst J.J.;

Orskov C., Bersani M., Johnsen A.H., Hoejrup P., Holst J.J.;

"Complete sequences of glucagon-like peptide-1 from human and pig
"Complete sequences"; ------19899[1989].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 53-81.
Thomsen J., Kristiansen K., Brunfeldt K., Sundby F.;
"The amino acid sequence of human glucagon.";
FBBS Lett. 21:315-312(1972).
[2]
SEQUENCE FROM N.A.
MEDILINE-86259053; PubMed=3725587;
White J.W., Saunders G.F.;
"Structure of the human glucagon gene.";
Nucleic Acids Res. 14:4719-4730(1986).
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FISSUE=Liver;
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"Hamster preproglucagon contains the sequence of glucagon and two related peptides."; Nature 302:716-718(1983).
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01-PEB-1996 (Rel. 33, Last sequence update)
28-PEB-2003 (Rel. 41, Last annotation update)
Glucagon precursor [Contains: Glicentin-related polypeptide (GRPP);
GLUCAGON; Glucagon-like peptide I (GLP1); Glucagon-like peptide 2
(GLP2)].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCG.
Mesocricetus auratus (Golden hamster).
Mesocricetus Aktazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
Mesocricetus.
NGELTAXID-10036;
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20909 MW; 7A99EEC629B2862C CRC64;
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A -> V (IN dbSNP:5650).
/FTId=VAR_014596.
K -> N (IN REF. 3).
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MEDLINE-83167563; PubMed-6835407;
Bell G.I., Santerre R.F., Mullenbach G.T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.
Matches 30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
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P01273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
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GLUC_MESCH
GLUC_MESCH
GLUC_MESCH
AAC GLUC_JT3,
DT 21-PEB-
DT 28-PEB-
DT 28-PEB-
DT GLUCAGG
DE GLUCAGG
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RESULT 6
GLOC_MOUSE
ID GLOCE, MOUSE
STANDARD; PRT; 180 AA.

AC P55095;
DT 01-0CT-1996 (Rel. 34, Last sequence update)
DT 01-0CT-1996 (Rel. 34, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Glucagon precursor [Contains: Glicentin-related polypeptide (GRPP);
DE Glucagon precursor [Contains: Glicentin-related polypeptide 2 GLOS ON CG.
DE GLUCAGON; Glucagon-like peptide 1 (GLP1); Glucagon-like peptide 2 GLOS ON CG.
ON Mus musculus (Mouse).
ON Musmallan Eatheria; Rodentia; Craniata; Vertebrata; Euteleostomi;
ON Musmallan Eatheria; Rodentia; Sclurognathi; Muridae; Murinae; Mus.
NCBI_TAID=10090;
NN CBI_TAID=10090;
NN CBI_TAID=10090;
NN SEQUENCE FROW N.A.
RC TISSUE-Fancreatic islets;
RX MEDINE-5544722; pubded=7730317;
RA RODINE-5547722; pubded=7730317;
RA RODINE-5547722; pubded=7730317;
RA RODINE-510090;
NCDORAGIO ON CONTRAINE S., Neckonable on the prohormone convertase
RT 1 and immunopurified prohormone convertase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISCUENCE FROM N.A.
TISCUENCE Factoristic islets;
MEDLINE-9524/712; PubMed-730317;
MCDOBJG J.K., MacKin R.B., Noe B.D.;
MCDOBJG J.K., MacKin R.B., Noe B.D.;
*Processing of mouse proglucagon by recombinant prohormone convertase 1 and immunopurified prohormone convertase 2 in vitro.";
J. Biol. Chem. 270:10136-10146(1995).
98 HARGIFISDVSSYLBGQAAKBFIAMLVKGR 127
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MEDLINE-85051023; PubMed=6548696;
Beinrich G., Gros P., Lund P.K., Bentley R.C., Habener J.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMEL, MS7688; AAA40588.1;
PIR; G36118; GCRPDU.
HSSP. P01274; 1GCN.
InterPro: IPR000532; Glucagon.
PERN: PF00123; hormone2; 3.
PRINTS; PP00075; GLUCAGON.
SMART; SW00070; GLUCA, 3.
PROSITE; P500250; GLUCAGON; 4.
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50 GL
81 GL
89 GL
127 GL
142 GL
127 GL
127 GL
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180 AA;
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D GLUC_RAT

COURTS

DT 01-7AN-198

DT 28-PEB-200

DE GLUCAGON P.

E BEDLINE-85

RA MEDLINE-85

RA HEINTICH G

RR 1 BEOLINE-85

RR MEDLINE-85

RR ME
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MOD_RES
SEQUENCE
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Best Local 3
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PEPTIDE
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        RA SHORED FROW N.A.

RA Shamsadin R., Knepel W.;

Shamsadin R., Shamsan R., Sh
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Bukaryota, Matazoa; Chordata; Craniata; Vartebrata; Buteleostomi;
Mammalla; Butheria; Rodentia; Hystricognathi; Octodontidae; Octodon
NCBL_TaxID=10160;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. MEDLINE-91155952; PubMed=2293024; Nishi M., Steiner D.F.; "Cloning of complementary DNAs encoding islet amyloid polypeptide, insulin, and glucagon precursors from a New World rodent, the degu, Octodon degus.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-AUG-1991 (Rel. 19, Created)
01-AUG-1991 (Rel. 19, Last sequence update)
01-AUG-1991 (Rel. 14), Last sequence update)
Glucagon (Rel. 41, Last annotation update)
Glucagon precursor (Contains: Glicentin-related polypeptide (GRPP);
Glucagon, Glucagon-like peptide 1 (GLP1); Glucagon-like peptide 2
(GLP2)].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 155; DB 1; Length 180; llarity 100.0%; Pred. No. 6.3e-15; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GLUCAGON-LIKE PEPTIDE 2.
595AA6DD9A589950 CRC64;
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146 1
180 AA;
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30; Conserv
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GLUC_COCTDE

AC P12890;
DT 01-AUG-1991 (DT 28-FEB-2003 (DE GLP2))

B GLUCAGOOD PRECOND (GLP2);
C GLP2);
C MARMALIA; EUION (C) MARMALIA; EUION (C
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PEPTIDE
SEQUENCE
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Best Local :
Matches 3
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Endocrinol. 4:1192-1198(1990).
FUNCTION: GLUCAGON PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDINE—85054853; PubMed=6094539;
MEDINE—85054853; PubMed=6094539;
Heinrich G., Gros P., Habener J.F.;
"Glucagon gene sequence. Four of six exons encode separate functional domains of rat pre-freqiueagon.";
J. Biol. Chem. 259:14082-14087(1984),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cleavage on pair of basic residues; Signal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rattus norvegicus (Rat).
Bukaryota, Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butherla; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBI_PaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-0AN-1988 (Rel. 06, Created)
01-5AN-1988 (Rel. 06, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Glucagon precursor [Contains: Glicentin-related polypeptide (GRPP);
Glucagon; Glucagon-like peptide 1 (GLP1); Glucagon-like peptide 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GLUCAGON-LIKE PEPTIDE 2.
AMIDATION (G-128 PROVIDE AMIDE GROUP).
GEB836160A9A3051 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GLICENTIN-RELATED POLYPEPTIDE, GLICAGON,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ch 100.0%; Score 155; DB 1; 1. Similarity 100.0%; Pred. No. 6.3e-15; 30; Conservative 0; Mismatches 0;
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Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SECORNCE FROM N.A. (ISOFORM INTESTINAL).
SECURES-Chicken; TISSUE-Intestinal mucosa;
SELINS-SP$5739; Pubmed=7776976;
ITWIN D.M., Wong J.;
Frout and chicken proglucagon: alternative splicing generates mRNA
transcripts encoding glucagon-like peptide 2.1,
MOIL Endocrinol. 9:267-277(1995).
                                                                                                                                                                                                                                                                                          Okamoto H.;
"Nucleotide sequence determination of chicken glucagon precursor
cDNA. Chicken preproglucagon does not contain glucagon-like peptide
                                                                                                                                               SEQUENCE FROM N.A. (ISOFORM PANCREATIC).
SPETIZS-CHICKEN; TISCHE-PENCREAS;
MEDLINE-00489492; PubMed=338135;
HISSEGAWA S., Terazono K., Nata K., Takada T., Yamamoto H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPOSITION, AND SEQUENCE OF 55-83.
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InterPro; IPR000532; Glucagon.
Pfan; PF00123; hormone2; 3.
PRINTS; PR0275; GLUCAGON.
SMART; SM00070; GLUCA,
                                                                                                                                                                                                                                                                                                                                                                                                                                 EBS Lett. 264:117-120(1990).
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                                                                           NCBI_TaxID=9031, 9103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 55-83.
       C This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation. C the European Bloinformatics Institutions as long as its content is in no way case by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial condities requires a license agreement (See http://www.isb-sib.ch/announce/cor send an email to licenseefisb-sib.ch).

EMBL; KO2813; AAA41235.1; JOINED.

EMBL; FO2813; FO2814; FO28
                                                                                                                                                                   MEDITNE-86304234; PubMed-3528148;

MEDITNE-86304234; PubMed-3528148;

Mojsov S., Heinrich G., Wilson I.B., Ravazzola M., Orci L.,

Mojsov S., Heinrich G., Wilson I.B., Ravazzola M., Orci L.,

"Preproglucagon gene expression in pancreas and intestine diversifies at the level of post-translational processing.";

T. Biol. Chem. 26:11880-11889(1986).

T. PUNCTION: GLUCAGON PROMOTES HUDROLINSIS OF GLICOGEN AND LIPIDS, AND RAISES THE BLOOD SUGAR LEVEL.

T. PUNCTION: GLUZ STIMULARES HURBEINAL GROWTH AND UPREGULARES VILLUS HEIGHT IN THE SMALL INTESTINE, CONCOMITANT WITH HURBEASED CRYPT CELL PROLIFERATION AND DECREASED BYTEROCYTE APOPTOSIS.

T. INDUCTION: PROMOTES IN THE A CELLS OF THE ISLETS OF LANGERHANS

IN RESPONSE TO A DROP IN BLOOD SUGAR CONCEMPRATION.

T. SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ó
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CLOC_CHICK

CLOC_CHICK

CLOC_CHICK

AC GLOC_CHICK

CLOC_CHICK

AC D01277; 091410;

DT 21-U1-1986 (Rel. 01, Created)

DT 28-PEB-2003 (Rel. 41, Last sequence update)

DF 28-PEB-2003 (Rel. 41, Last annotation update)

DF Glucagon precursor [Contains: Glicentin-related polypeptide (GRPP);

DF Glucagon; Glucagon-like peptide 1 (GLP1); Glucagon-like peptide 2

DF (GLP2).

CGLP2).

CGLP2).

CGLP2).

CGLP2).

CGRP2).

CGRP2.

CGRP2.
"Pre-proglucagon messenger ribonucleic acid: nucleotide and encoded amino acid sequences of the rat pancreatic complementary decorpribonucleic acid"; Endocrinology 115:2176-2181(1984).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               THINKEY ALUCAGON: CTYSTALLIZATION, ANNINO ACID COMPOSITION AND INTENDAL ALUCAGON: CTYSTALLIZATION, AND ACID COMPOSITION INTENDALS AND ACID COMPOSITION. PROMOTES THE BLOOD SUGAR LETEL:

-1 - FUNCTION: PROMOTES THE BLOOD SUGAR LETEL:

-1 - ALTERNATIVE PRODUCTS:

-1 - ALTERNATIVE PRODUCTS:

-2 - THE BLOOD SUGAR LETEL:

-3 - THE BLOOD SUGAR LETEL:

-4 - ALTERNATIVE PRODUCTS:

-5 - THE BLOOD SUGAR LETEL:

-6 - THE BLOOD SUGAR LETEL:

-7 - THE BLOOD SUGAR CONCENTRATION

-7 - THE BLOOM SUGAR THE CHOCKEN

-7 - THE SUGAR SUGAR SUGAR SUGAR CONCENTRATION

-7 - THE BLOOM SUGAR S
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Glucagon family; Hormone; Cleavage on pair of basic residues; Signal; Amidation; Alternative splicing.
22 GLICENTIN-RELAIED POLYPEPTIDE.
23 52 GLICENTIN-RELAIED POLYPEPTIDE.
SPECIES=Chicken;
MEDLINE=76069271; PubMed=1194290;
POLlock H.G., Kimmel J.R.;
"Chicken glucapon, Isolation and amino acid sequence studies.";
J. Biol. Chem. 250:9377-9380(1975).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPECIES=M. gallopavo;
MEDLINE-7074118; PubMed-4645932;
Markussen J., Frandsen E.K., Heding L.G., Sundby F.;
"Turkey glucagon: crystallization, amino acid composition and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GLICENTIN-RELATED POLYPEPTIDE.
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AMIDATION (G-146 PROVIDE AMIDE GROUP).

D -> E (in isoform LPI).

Fyria-vsg-001756.

Missing (in isoform LPI).

/Fyria-vsg-001777.

BI32E3FE46873E72 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 88.4%; Score 137; DB 1; Length 204; Best Local Similarity 83.3%; Pred. No. 2.6e-12; Matches 25; Conservative 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      116 HADGRYTSDISSYLEGQAAKEFIAWLVNGR 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 HAEGTFISDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE 204 AA; 23553 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Name-LPI;
Isold=012956-2; Sequence=VSP_001756, VSP_001757;
Isold=012956-2; Sequence=VSP_001756, VSP_001757;
I-TISSUE SPECIFICITY: Isoform LPII is expressed in both pancreas and intestine. Expression of isoform LPI is restricted to the pancreas. Neither isoform is detected in salivary glands.
-!-INDOGTION: Produced in the a cells of the islets of langerhans in response to a drop in blood sugar concentration.
-!-SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. (ISOFORMS LPI AND LPII), AND TISSUE SPECIFICITY.
TISSUE-Intestine, and Pancreas;
MEDIATE-PATAT; PubMed=002012;
Chen Y.B., Drucker D.J.;
"Tissue-specific expression of unique mRNAs that encode proglucagon-derived peptides or exendin 4 in the lizard.";
J. Biol. Chen 272:4108-4115(1997).
J. Biol. Chen 272:4108-4115(1997).
The blood sugar level.
-I- ALTERNATIVE PRODUCTS:
Event-Alternative splicing; Named isoforms=2;
Name-LPII.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                   147 AMIDATION (G-148 PROVIDE ANIDE GROUP).
151 151 D -> E (in isoform Pancreatic).
152 206 Missing (in isoform Pancreatic).
152 205 Missing (in isoform Pancreatic).
205 AA; 23875 MY; AB299EIB02FC6AA4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Glucagon: Glucagon-like peptide 1 (GLP-1); Glucagon-like peptide 2 (GRPP);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (GLP-2)]. Heloderma suspectum (Gila monster); Glucagon-like peptide; Heloderma suspectum (Gila monster).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Helodermatidee; Helodermatidee; McDI_TaxID-8554;
                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 92.3%; Score 143; DB 1; Length 206; Best Local Similarity 86.7%; Pred. No. 3.7e-13; Matches 26; Conservative 3; Mismatches 1; Indels
                                                                                              GLUCAGON-LIKE PEPTIDE 1.
                                                                                                                                                        GLUCAGON-LIKE PEPTIDE 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            118 HAEGTYTSDITSTLEGQAAKEFIAWLVNGR 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT; 204 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IsoId=012956-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nssk) Full/4) ledn.
Interpro; IPR000532; Glucagon
Pfam; PF00123; hormone2; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; 077612; AAB51129.1; -. EMBL; 077611; AAB51128.1; -. HSSP; P01274; 1GCN.
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                             PEPTIDE
PROPEP
PEPTIDE
PROPEP
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MOD_RES
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GLUC_HREEGU

DD 128-PEB

DT 28-PEB

DT 28-PEB

DD 28-PE
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RC TISSUB-Pancreas;

RX PUDLINE-88257102; PubMed=3260236;

RX PDLINE-88257102; PubMed=3260236;

RY POLIOCK H.G., Bamilton J.W., Rouse J.B., Ebner K.B., Rawitch A.B.;

ROLINE-88257102; PubMed=3260236;

RY Tisolation of peptide hormones from the pancreas of the bullfrog

RY Trolation of peptide hormones from the pancreas of the bullfrog

RY Trolation of peptide hormones from the pencreas of the bullfrog

RY Trolation of peptide hormones from the pencreas of the bullfrog

RY Trolation of peptide hormones from the pencreas of the bullfrog

RY Trolation of peptide hormones from the pencreas of the bullfrog

RY Trolation of the following from the pencreas of the bullfrog

RY STATE AND SUGAR LEVEL.

CC -1- INDUCTION: PROMOTES HYDROLYSIS OF GINCOGEN AND LIDIDS, AND RAISES

CC -1- INDUCTION: PROMOTES HYDROLYSIS OF THE ISLETS OF LANGERHANS

CC -1- INDUCTION: PROMOTES HYDROLYSIS OF THE SECRET OF LANGERHANS

CC -1- INDUCTION: PROMOTES TO THE GLUCAGON FAMILY.

CC -1- INDUCTION: PROMOTES TO THE GLUCAGON FAMILY.

DR RYNES: PROMOTES SEQUENCES.

CC -1- INDUCTION: PROMOTES TO THE GLUCAGON FAMILY.

DR RYNES: PROMOTES GLUCAGON.

RY RICHARD FROM THE AND STATE SECRET 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                              Glucagon precursor (Fragments).
Sana catesbelana (Bull frog).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata; Buteleostomi,
Amphiblus, Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana
NCBI_raxID=8400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
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83.2%; Score 129; DB 1; Length 103;
Best Local Similarity 76.7%; Pred, No. 1.8e-11;
Matches 23; Conservative 5; Mismatches 2; Indels
GLUC_BRACA STANDARD; PRT; 103 AA. P15438; P15439; P15440; P15428; P15439; P15440; P15428; P15429 (Rel. 76, Last sequence update) 01-UUL-1993 (Rel. 26, Last annotation update)
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RESULT 14
GLUZ-LOPAM
C GLUZ-LOPAM
C GLUZ-LOPAM
C C GLUZ-LOPAM
DT 01-NOV-1986
DT 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RC SPECIES—A. anguilla, and A. rostrata;

RC SPECIES—A. anguilla, and A. rostrata;

RC TISSUE—Panoreas;

REDINUR—91340668; PubMed=1874385;

RA Conlon J.M., Andrews P.C., Thim L., Moon T.W.;

RT De primary structure of glucagon-like peptide but not insulin has been conserved between the American eel, Anguilla anguilla.";

RL Deen conserved between the American eel, Anguilla rostrata and the European eel, Anguilla anguilla.";

RL DEN BRILIS;

RIST SELIZS;

RIST SELIZS;

RIST RELIZS;

RIST RELIZS RELIZS;

RIST RELIZS RELIZS;

RIST RELIZS RELIZS RELIZS RELIZS RELIZE 
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Xenopus laevis (Affican clawed frog).

Bukaryota, Metaxoa; Chordara; Craniata; Vertebrata; Euteleostomi; Amphibia, Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                       The Xenopus proglucagon gene encodes novel GLP-1-like peptides with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-Pancreas;
MEDLINE-97368292; PubMed-9223287;
Irwin D.M., Satkunarajah M., Wen I., Brubaker P.L., Pederson R.A.,
Wheeler M.B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 81.3%; Score 126; DB 1; Length 30; Best Local Similarity 76.7%; Pred. No. 1.4e-11; Matches 23; Conservative 4; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT; 266 AA.
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                                                                            STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Xenopodinae; Xenopus.
NCBI_TaxID=8355;
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GLUI, XENLA

C GLUI, XENLA

AC 042143;
DT 28-FEB-2003;
DT 28-FEB-2003;
DF 28-FEB-2003;
DF GLP-1A);
DE GLUCAGON I PR

C GLP-1A);
DE GLP-1A);
                                                                                                                                                                                                                                                                                                    GLUM_ANGAN
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"Isold=042143-2; Sequence-VSP_001755;
-1-SIMILARITY: BELONGS TO THE GLOCAGON FAMILY.

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O1-NOV-1986 (Rel. 03, Last sequence update)
O1-NOV-1986 (Rel. 03, Last sequence update)
16-OCT-2001 (Rel. 40, Last amondation update)
16-OCT-2001 (Rel. 40, Last amondation update)
Glucagon II glucagon [Ist peptide II].
Lophius americanus (American goosefish) (Anglerfish).
Eukaryota: Metazoa; Chordata: Craniata 'Vertebrata; Euteleostomi;
Actinopterygli; Neopterygli; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha: Paracanthopterygli; Lophiiformes; Lophiidae; Lophius.
insulinotropic properties.";
Proc. Natl. Acad. Sci. U.S.A. 94:7915-7920(1997).
-I- FUNCION: Process hydrolysis of glycogen and lipids, and raises the bloods sugar level.
-I- ALTERNATIVE PRODUCIS:
-I- ALTERNATIVE PRODUCIS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE-83135785; PubMed=6338015;
Lund P.K., Goodman R.H., Montminy M.R., Dee P.C., Habener J.F.;
"Anglerfish islet pre-proglucagon II. Nucleotide and corresponding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80.6%; Score 125; DB 1; Length 266; 70.0%; Pred. No. 1.7e-10; tive 7; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             214 261 Missing (in isoform 2).
/FTIG=VSP_001755.
266 AA; 30951 MW; 544F7BBCZ0AF872C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             122 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180 HAEGTFINDMINILEEKAAKEFVGWLIKGR 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 HAEGTFTSDVSSYLEGOAAKEFIAWLVKGR 30
                                                                                                                     Name=1;
IsoId=042143-1; Sequence=Displayed;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 70.0 Matches 21; Conservative
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Search completed: October 15, 2003, 10:53:39
Job time : 14,2787 secs
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28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
28-FEB-2003 (Rel. 41, Last annotation update)
28-FEB-2003 (Rel. 41, Last annotation update)
(GLP-1A); Glucagon Like peptide 1B (GLP-1B); Glucagon-like peptide 1C (GLP-1C);
Xenopus laevis (African clawed frog).
Zentaryota; Metazoa; Chordata; Cranata; Vertebrata; Euteleostomi;
Amphibia: Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
NCBI_TaxID=8355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMB1, V00632; CAA23905.1; -.
PIR, A05150; GCAF2.
InterPro: 1274, 16CN.
InterPro: 1274, 16CN.
Pfan: Pr00123; Abramone2; 2.
PRINTS: PR00275; GLUCAGON.
SWART; SM00070; GLUCAGON.
SWART; SM00070; GLUCAGON.
SWART; SM00070; GLUCAGON; 2..
Glucagon family; Hormone; Cleavege on pair of basic residues; Signal.
SIGNAL
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TISSUE-PROCESS;

MEDINIE-9736829; PubMed-9223287;

MEDINIE-9736829; PubMed-9223287;

Wheeler M.B.; Satkunarajah M., Wen Y., Brubaker P.L., Pederson R.A.,

Wheeler M.B.; Proglucagon gene encodes novel GLP-1-like peptides with

"The Xenopus Proglucagon gene encodes novel GLP-1-like peptides with

"Insulinotropic propertiess.";

Proc. Natl. Acad. Sci. U.S.A. 54:7915-7920(1997).

-i. FUNCTION: Promotes hydrolysis of glycogen and lipids, and raises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                   77.4%; Score 120; DB 1; Length 122; 70.0%; Pred. No. 4e-10; tive 6; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GLICENTIN-RELATED POLYPEPTIDE. GLUCAGON II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GLUCAGON-LIKE PEPTIDE II.
5140AC47EF915519 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT; 219 AA.
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amino acid sequence of the cDNA.";
J. Biol. Chem. 258:3280-3284(1983)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22 49 GLI
52 80 GLO
83 86
89 119 GLO
122 AA; 14171 NW; 5
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GLOZESTA
AC 042144;
DT 28-FEB-2003 (
DT 28-FEB-2003 (
DT 28-FEB-2003 (
DT 28-FEB-2003 (
DE (GLP-1A)); Glue
CGP-1A); Glue
CGP-1A); Glue
CC Amopus laevi
CC Amopus lae
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PEPTIDE
PROPEP
PEPTIDE
SEQUENCE
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EMBL, APO04433, AAB65661.1; ...

BR EMBL, APO04433, AAB65661.1; ...

BR EMBL, APO04532, Glucagon.

BR FAMPT: SW00070; GLUCA; 4.

BR FORDITE; PS00260; GLUCAGON; 3.

RW Glucagon Family; Hormone; Signal; Cleavage on pair of basic residues;

Multigene family.

POTEWITAL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               77.4%; Score 120; DB 1; Length 21:
ilarity 66.7%; Pred. No. 7.3e-10;
Conservative 7; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                  20 POTENTIAL.
50 GLUCAGON.
133 GLUCAGON-LIKE PEPTIDE IA.
172 GLUCAGON-LIKE PEPTIDE IB.
178 GLUCAGON-LIKE PEPTIDE IB.
219 GLUCAGON-LIKE PEPTIDE IC.
219 A: 25271 MW; ACC699233C362CEO CRC64;
the blood sugar level.
-!- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180 FARGTFINDMINITERAAKEFVGWLINGR 209
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 20; Conserve
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Q81u39 dugesia jap
Q81u36 hydra magni
Q81u36 periplaneta
O8ayp5 trachurus j
Q8ayp4 acipenser s
Q8ayp6 nocohynchu
O8bjf8 mus musculu
O8bjf8 mus musculu
O8bjf8 mus musculu
O8bjf8 moopus lae
Q8xp5 oncorhynchu
Q8tpj methanosic
Q9xy14 camorhabdi
Q8xy14 camorhabdi
Q8xy8 pralstonia s
Q9xx14 camorhabdi
Q8xw8 yralstonia s
Q9xy8 pranchodiu
Q8xw8 yralstonia s
Q8xy8 arabidopsis
Q8xy8 arabidopsis
Q8xy8 arabidopsis
Q8xy8 methanosarc
Q25062 hydractinia
Q86x60 camorhabdi
Q8n5b9 camorhabdi
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P SEQUENCE FROM N.A.

C TISSUE-Pancreas;

A Limesand S.W., UT.;

Limesand S.W., Bay W.W. UT.;

Limesand S.W., Bay W.W. UT.;

To faracterization of the endorrine pancreas in an ovine placental upon the control professor.

U Insufficiency URGR fetus.",

Submitted (JUL-2022) to the EMBL/GenBank/DDBJ databases.

RMBL; AF529185; AAM94409.1;

PRIM: PF00123; hormone2; a.

PRIM: SM000013; hormone2; a.

PRIM: SM000010; GLUCAGON.

DR SWART: SM00000; GLUCAGON.

DR SWART: PS00260; GLUCAGON.

DR PROSTE: PS00260; GLUCAGON.

PRIM: PROSTE: PS00260; GLUCAGON.

DR ROALTER 176 AA; 20335 WW; 13174039BD6CE2B3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Preproglucaçon (Fragment).

Vis aries (Sheo).

Bukaryota Metazoa Chordata; Craniata; Vertebrata; Buteleostomi;

Mammalia; Butheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;

Boyidae; Caprinae; Ovis.

NCBL_RAXID-9940;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1
08MAZ5
AC 08M4Z5
AC 08M4Z5,
DF 01-OCT-2002 (TEMBLEL, 22, Created)
DF 01-OCT-2002 (TEMBLEL, 22, inst sequence update)
DF 01-MAR-2003 (TEMBLEL, 23, inst annotation update)
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                       GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
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155
1 HAEGIFTSDVSSYLEGQAAKEFIAMLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
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                                                                                                                                                OM protein - protein search, using sw model
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Maximum Match 1008
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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Q8m125 ovis aries
Q9100 canis famil
Q8uw19 hoplobatrac
Q91409 oncorhynchu
Q91971 oncorhynchu
Q91189 oncorhynchu
Q94043 mubloplites
Q9Cyfl mus musculu
Q9687 mus musculu
Q9687 mus musculu
Q9687 carurus
Q96227 mus musculu
Q931h2 wolinella s
Q9G224 dictalurus
Q90Xz4 ictalurus
Q90Xz4 ictalurus p
Q914190 methanosarc Description Q8M725 Q95LG0 Q914N9 Q914N9 Q91971 Q91189 Q9DDE Q9CVF1 Q9M17 Q9M17 Q9M17 Q9M17 Q9M17 Q9M14 % Query Match Length I

Result No.

Query Match 100.0%; Score 155; DB 6; Length 176; Best Local Similarity 100.0%; Pred. No. 1.5e-15; Matches 30; Conservative 0; Mismatches 0; Indels (1 HAEGTFISDVSSYLEGQAAKEFIAWLVKGR 30

RESULT 2

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EMBL, 019913, AAC59667.1; EMBL, 019913, AAC59667.1; EMBL, 019917, AAC59669.1; EMBL, 019918, AAC60212.1; EMBL, 019918, AAC60213.1; INTELPOSE EM
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PEDGENCE FROM N.A.

YEARS C.-M., Chow B.K.C.;

RT "Identification of a proglucagon cDNA from Rana tigrina rugulosa that a modes two GLP-LS.";

Can. Comp. Endocrinol. 124:0-0(2001).

BE MEDI. AR34209; AAL38758.1; -.

DR REMI. AR34209; AAL38758.1; -.

DR PRIM. PRO0123; HORMORDS.

PERM. PRO0123; HORMORDS.

PERM. SARAF: SAN00701; GLUCAR, W.

PROSITE; PS00260; GLUCAGON; 4.

DR PROSITE; PS00260; GLUCAGON; 4.

SARAF: Z5615 AM; Z5615 AW; C72D926E7F89E381 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
                                    O95LC0 PRELIMINARY, PRT, 180 AA.
O95LC0 (TEMBLEAL. 19, Created)
O1-DEC-2001 (TEMBLEAL. 19, Last sequence update)
O1-DEC-3003 (TEMBLEAL. 23, Last annotation update)
O1-MAR-2003 (TEMBLEAL. 23, Last annotation update)
O1-MAR-3003 (TEMBLEAL. 23, Last annotation update)
O2016 familiaris (Dog).
MARRATORIA MATAZOR, Chordata, Craniata, Vertebrata; Euteleostomi, Marmalia; Eutheria, Carnivora, Fissipedia, Canidae, Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Proglucagon.

Budolóbatrous rugulosus.

Bukaryota, Metaszoa, Chordata, Craniata, Vertebrata, Euteleostomi,

Amphibia, Batrachia, Anura; Neobatrachia, Ranoidea, Ranidae;

Hoplobatrachus.

NCBL_TaxiD—110072;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         frwin D.M.; coning of proglucagon from the stomach and pancreas of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Watch 83.2%; Score 129; DB 13; Length 220; Local Similarity 76.7%; Pred. No. 1.9e-11; hes 23; Conservative 5; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 155; DB 6; Length 19
Best Local Similarity 100.0%; Pred. No. 1.6e-15;
Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            dog.";
Submitted (SEP-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AR108439; AAL09425.1; -.
InterPro; IPR000532; Glucagon.
Prim: PF00123; hormone2; 3.
Prim: SP00075; GLUCAGON.
SMART; SM00070; GLUCAGON.
PROSTIE: PS00260; GLUCAGON; 2.
SEQUENCE 180 AA; 21114 MW; 80F6694laFC324FD CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-WAR-2002 (TrEMBLrel. 20, Created)
01-WAR-2002 (TrEMBLrel. 20, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S:
Matches 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 4
Q91409
ID Q91409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OSUWL9;
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(280ML)
(380ML)
(380M
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NC 091409; 091232;
01-WOV-1996 (TrEMELrel. 01, Last sequence update)
01-WOV-1996 (TrEMELrel. 01, Last sequence update)
01-WOV-1996 (TrEMELrel. 01, Last sequence update)
01-WAR-2003 (TrEMELrel. 01, Last sequence update)
01-WAR-2003 (TrEMELrel. 01, Last sequence update)
05E MAR-2003 (TrEMELrel. 02, Last annotation update)
05C ACLINOPTEAGN (Fragment).
05C ACLINOPTEAGN (Fragment).
05C ACLINOPTEAGN (Minor of Contact of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             091971 PRELIMINARY, PRT; 178 AA.
01901971: 091408: 091188; 020189;
01-NOV-1996 (TIEMBILE). 01, Created)
01-NOV-1996 (TIEMBILE). 01, Last sequence update)
01-NOV-1996 (TIEMBILE). 01, Last sequence update)
01-UNR-2001 (TIEMBILE). 17, Last annotation update)
61ucagon I precursor.
04corhynchus mytiss (Rainbow trout) (Salmo gairdneri).
04corhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 76.1%; Score 118; DB 13; Length 72; Best Local Similarity 66.7%; Pred. No. 2.4e-10; Matches 20; Conservative 7; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NON_TER 1 1 1 SEQUENCE 72 AA, 8293 MW; 8584352B1C260A31 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 HAEGTFISDVSSYLEGOAAKEFIAWLVKGR 30
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ID 09DBE6 PRELIMINARY; PRI; 121 AA.

C 09DBE6 PRELIMINARY; PRI; 121 AA.

DI 01-MAR-2001 (TEMBLRel. 16, Last sequence update)

DT 01-CT-2001 (TEMBLRel. 22, Last amortation update)

DT 01-CT-2002 (TEMBLRel. 22, Last amortation update)

DE 01-OGT-2002 (PEMBLRel. 22, Last amortation update)

CG 0R GLO.

S DACADYDANIO rerio (Zebrafish) (Danio rerio).

C RALIMOPTENYBII; Neopterygii; Teleostei; Ostariophyši; Cypriniformes; C Cyprinidae; Danio.

DX MCHI_TAXID=7955;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTORNOL OF TEMBLE 16, Created)
DI 1-MAR-2011 (TrEMBLE 16, Last sequence update)
DI 01-MAR-2011 (TrEMBLE 16, Last sequence update)
DI 01-CAT-2012 (TrEMBLE 1. 22, Last annotation update)
DE Proglucagon (Fragment)
OC EMIRATORA: Mercand Chordeta: Craniata; Vertebrata; Buteleostomi;
CAT-10-21 Mapple 1. Neopterygii. Temesta: Duteleostei; Buteleostei; Buteleostei; Cat-10-21 Mapple 1. Neopterygii. Neopterygii. Percomorpha; Perciformes; Percoidei; Cat-10-21 Mapple 1. Neopterygii. Percomorpha; Perciformes; Percoidei; Cat-10-21 Mapple 1. Neopterygii. Temesta: Neopterygii. Neopterygii.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 66.5%; Score 103; DB 13; Length 121; Best Local Similarity 66.7%; Pred. No. 8.8e-08; Matches 20; Conservative 5; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHAIN 49 79 GLUCAGON.
CHAIN 88 121 GLUCAGON-LIKE PEPTIDE 1.
SEQUENCE 121 AA; 13537 MW; A85385F690DA180F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT; 95 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 HAEGIFTSDVSSYLEGOAAKEFIAWLVKGR 30
                                                                                                     1 HAEGTFISDVSSYLEGQAAKEFIAWLVKG 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
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(090543
ID 090543
NC 09054
NC 09054
NC 09054
ND 11-MA
ND 11-MA
ND 101-MA
ND 1
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RN HIJ
RY SEQUENCE FROM N.A., AND ALTERNATIVE SPLICING.
RX INSTALE SAMIL INTESTINE, AND PANCREAS;
RX ITAID D.M., Nong J., AND PANCREAS;
RX ITAID D.M., Nong J., BACATTA SAMIL INTESTINE, AND PANCREAS;
RX Trout and chicken proglucagon: alternative splicing generates mRNA
RY Trout and chicken proglucagon: alternative splicing generates mRNA
RY Trout and chicken proglucagon: like petitide 2.";
RX INTESTINE, ROSTORIA SINGUARIA SECORDANA INTESTINE, CHOWN HERB) AND PANCREATICA ARE PRODUCES I STORDANG INTESTINE, CHOWN HERB) AND
RANGERATICA ARE PRODUCED BY ALTERNATIVE SPLICING.
C-1- STMILARITY: BELONGS TO THE GLOCAGON PAMILY.
CC STMILARITY: BELONGS TO THE GLOCAGON PAMILY.
CN REMBL: U19914; AACGO10.1; -.
CN REMBL: U19915; AACGO10.1; -.
CN REMBL: U19914; CACCO10.1; -.
CN REMBL: U19915; AACGO10.1; -.
CN REMBL: U19916; A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
DR PFam; PP00123; hormone2; 3.

DR ANAN; SM0070; GLUCAGON.

DR SMART; SM0010; GLUCA: 3.

PROSITE; PS00260; GLUCAGON: 3.

RW Glucagon family; Hormone; Cleavage on pair of basic residues; Signal; Miternative splicing; Multigene family.

FT SIGNAL 1 POTENTIAL.

T SPETIDE 2 49 GLUCAGON-LIKE PEPTIDE 1.

FT PEPTIDE 52 80 GLUCAGON-LIKE PEPTIDE 1.

FT PEPTIDE 137 169 GLUCAGON-LIKE PEPTIDE 2.

FT PEPTIDE 137 169 GLUCAGON-LIKE PEPTIDE 2.

FT PEPTIDE 124 178 MISSING (IN PANCERATIC ISOFORM).

FT VARSPLIC 124 178 MISSING (IN PANCERATIC ISOFORM).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
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091189, 092168;
01.00v-1996 (TREMELREL. 01, Last sequence update)
01.00v-1996 (TREMELREL. 23, Last sequence update)
01.40x-2003 (TREMELREL. 23, Last annotation update)
61ucagon II precursor.
0ncochynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleosrel; Euteleostes;
NCEL_TaxID=8022;
NCEL_TaxID=8022;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 72.9%; Score 113; DB 13; Length 178; Best Local Similarity 65.5%; Pred. No. 4.1e-09; Matches 19; Conservative 7; Mismatches 3; Indels (
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Pest Local Similarity 66.7%; Pred. No. 7.1e-10;
Matches 20; Conservative 7; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 HAEGIFTSDVSSYLEGOAAKEFIAWLVKGR 30
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PRT; 144 AA.

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RN SEQUENCE FROM N.A.

RN STRING-STRIAL(3); IISSUE-Small intestine;

RX KAWAL J., Shingawa A., Shingata K., Yoshino M., Itoh M., Ishii Y.,

RA KAWAL J., Shingawa A., Fukunishi Y., Konon H., Adachi J., Fukuda S.,

RA ARAWAR Y., Shingawa A., Fukunishi Y., Konon H., Adachi J., Fukuda S.,

Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kasukawa T., Saito R.,

RA Alzawa K., Izawa M., Ashini K., Kiyosawa H., Kasukawa T., Saito R.,

RA Adora W., Matushi K., Ashinda J., Batlaro S., Casavant T.,

RA Radora W., Matushi R., Suzuki R., Tomita M., Magner L., Washio T.,

RA Saki K., Okido I., Furuno M., Aono H., Baldarelli R., Barsh G.,

RA Bake J., Daffelli D., Bolunga N., Carninoi P., de Bonaldo M.F.,

RA Sakai K., Okido I., Fletone C., Fujita M., Gariboldi M.,

RA Sakai M., Jafil D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,

RA Brownstein M.J., Bull C., Fletone C., Fujita M., Gariboldi M.,

RA Gross P., Narchionni L., Mashima J., Mazzarelli J., Mombaerts P.,

RA Nordone P., Ring B., Kinowald M., Rodriguez I., Sakamoto N.,

RA Saski H., Edyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,

RY, Hayahizaki I.;

RY, Skopelbach C., Sept T., Shibata Y., Storch K.-F.,

RY, Hayahizaki I.;

RHAN, AKOOGS B. BAB25592.1; -

DR HSSP; PO1274; IGCN.

BRBJ, AKOOGS GLUCAGON;

RHATT, SWOOOTO, GLUCA, I.

BRBJ, SEORTE, SOOOTO, GLUCAGON;

RHATT, SHOOTO, GLUCA, I.

SEQUENCE 144 AA; 16389 WW; 36561866514DARCS CRC64;
                                                                                                                                                                                                                                                    01-00N-2001 (TrEMBLrel. 17, Created)
01-00N-2001 (TrEMBLrel. 17, Last sequence update)
01-00N-2001 (TrEMBLrel. 17, Last sequence update)
61-00N-2001 (TrEMBLrel. 19, Last sequence update)
62-00 (TrEMBLrel. 19, Last annotation update)
63-00 (TremBlrel. 19)
61-00 (Tr
                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                           090887
                                                             RESULT 10
Q9D887
                                                                                                                                                                            δĀ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus (Mouse),
Makaryotta, Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi;
Mammallat, Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCEL_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
39.4%; Score 51; DB 11; Length 130;
Best Local Similarity 40.0%; Pred. No. 0.25;
Matches 12; Conservative 7; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 58.1%; Score 90; DB 13; Length 96. Best Local Similarity 46.7%; Pred. No. 6.5e-06; Matches 14; Conservative 10; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NOW TER 1 1 1 SEQUENCE 130 AA; 14906 MW; 95B3B6B91E2A7592 CRC64;
OGCYP1 PRELIMINARY; PRT; 130 AA. 09CVP1, 01-UNY-2001 (TrEMBLEL. 17, Czeated) 01-UNY-2001 (TrEMBLEL. 17, Last sequence update) 01-UNZ-2001 (TrEMBLEL. 19, Last annotation update) dastric inhibitory polypeptide (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1::||||:|||:||:|||::||| | 1::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||:|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||::|| ||:|| ||::|| ||::|| ||::|| ||:|| ||::|| ||:|| ||::|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| |
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InterPro; IPR00532; Glucagon.
Pfam; PF00123; hormone2; 1.
SMARK; SM0070; GLUCA; 1.
PROSITE; PS00260; GLUCAGON; 1.
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090791
110 090797
090797
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O1-OCT-2002 (TIEMBILE1. 22, Created)

O1-OCT-2003 (TIEMBILE1. 22, Last sequence update)

O1-MAR-2003 (TIEMBILE1. 22, Last annotation update)

Vasoactive intestinal polypeptide precursor.

Vasoactive (Bovine).

Bukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia: Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;

NCBI_TaxID=5913;
Query Match 39.4%; Score 61; DB 11; Length 144; Best Local Similarity 40.0%; Pred. No. 0.29; Matches 12; Conservative 7; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
MEDLINE-22092342; pubXed=12097482;
Hamelink C., Lee H.-W., Chen Y., Grimaldi M., Eiden L.E.;
                                                                                                                                                                                                                                                                                                                                                                                        1 HAEGTFISDVSSYLEGGAAKEFIAWLVKGR 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 HAEGTFTSDVSSYLEGQAAKEFIAWLVK 28
                    13; Conservative
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                                                                                                                                                                                                                                                                  RESULT 13
Q931H2
ID Q931H
AC Q931H
                    Matches
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RP SECURNCE FROM N.A.

RC STRAIN-C57BL/6J; TISSUB-Cecum;

RA Arakawa T., Hara M., Fukunishi Y., Kohino M., Itoh M., Ishli Y.,

RA Arakawa T., Hara M., Fukunishi Y., Konno H., Adachi J., Fukuda S.,

RA Arawa Y., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

RA Arawa Y., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

RA Adota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

RA Teleschmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,

RA Radota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

RA Radota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

RA Radota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

RA Radota K., Matsuda H.A., Ashburner M., Balarelli R., Barsh G.,

RA Sakai K., Okido T., Furuno W., Anon H., Baldarelli R., Barsh G.,

RA Sakai K., Okido T., Furuno W., Anon H., Baldarelli R., Barsh G.,

RA Bake J., Boffelli D., Bolunga N., Carninot P., de Bonaldo M.F.,

RA Gustincich S., Hill D., Eofmann M., Hume D.A., Kamiya M., Lee N.H.,

RA Gustincich S., Hill D., Eofmann M., Hume D.A., Kamiya M., Lee N.H.,

RA Gustincich S., Hill D., Eofman J., Mazzarelli J., Mombaerts P.,

RA Gustincich S., King B., Ringwald M., Redriguez T., Sakanoto N.,

RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,

RA Mynshaw-Borocka K., Wang K.H., Weitz C., Whittakar C., Wilming L.,

RA Hagashizaki Y.;

RA Her Gols Seb-Sed (2001).

RA MGD: MGI-98933; Vip.

RA MGD: MGI-98933; Vip.

RA MGD: MGI-98933; Vip.

RA PROMIS: PROMOTO: GLOCA, S.,

RA RAMIN: SHOMOTO: GLOCA, S.,

RA RAMIN SHOMOTO: GLOCA, S.,

RA
*Coincident elevation of cAMP and calcium influx by PACAP-27 synergistically regulates vascactive intestinal polypeptide gene transcription through a novel FKA-independent signaling pathway. The Neurosci. 22:5310-5320(2002).

**RMBL; AF50310; AAM28152.1; InterPro: IPR00053; Glucagon. Pfam; PF00133; Dicmone2; 2. Prints; PR00123; Dicmone2; 2. Prints; PR00275; GLUCAGON. SMART; SW0070; GLUCAGON. 2. PRINTS; PR00275; GLUCAGON. 2. SMART; SW0070; GLUCAGON; 2. Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (Mouse).
Makaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia: Eutherla, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         38.1%; Score 59; DB 11; Length 171; 43.3%; Pred. No. 0.71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 38.7%; Score 60; DB 6; Length 170; Best Local Similarity 43.3%; Pred. No. 0.5; Matches 13; Conservative 6; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL 1 22 POTENTIAL.
CHAIN 11 107 PHI.
CHAIN 125 152 VII.
SEQUENCE 170 AA, 19164 MW, 9C6A6049AF7BFF91 CRC64,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q9D227 PRELIMINARY, PRT; 171 AA. Q9D227, Q9D227, 01-JUN-2001 (TLEMBLRel. 17, Created) Ol-JUN-2001 (TLEMBLRel. 17, Last sequence update) 01-OCT-2002 (TLEMBLRel. 22, Last annotation update) Vasoactive intestinal polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81 HADGVFTSDYSRLGQLSAKKYLESLIGKR 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKGR 30
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Best Local Similarity
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Promone (CRR) and pitting adequate cyclase-activating polypeptide committee (DACAP) in the abrain and pitting adequate.

Pradinger E.A., Sherrood N.M.;

PRADINGER E.A., Sherrood N.M.;

PRINTS, PROO123; Glucagon.

PRINTS, PROO123; Hormone. 2.

PRINTS, PROO125; Glucagon.

PRANT; SMOOTO, Gluca, 2.

PROSITE: PSOO126; Gluca, 2.

PROSITE: PSOO126; Gluca, 2.

PRADINGER E.A. SHERROOF STATE SHORTH HORMONE.
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01-MAR-2001 (TTEMBLEE). 16, Last sequence update)
01-MAR-2003 (TTEMBLEE). 23, Last annotation update)
Growth hormone-releasing hormone/pituitary adenylate cyclase-activating polypeptide.
ACTAP1.
BURATYOLA: Metacoa; Chordata; Craniata; Verrebrata; Enteleostomi; Actinopteryqui; Neopteryqii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Danio.
NCBL_TAXID-7955;
093H2 PRELIMINARY; PRT; 389 AA.
093H27, O1-DEC-2001 (TERMELRE). 19, Created)
01-DEC-2001 (TERMELRE). 19, Last sequence update)
01-MAR-2003 (TERMELRE). 23, Last annotation update)
80H2 transferase precursor.
80H2 transferase precursor.
Welinella succinogenes.
Bacteria, Proteobacteria: Epsilonproteobacteria; Campylobacterales;
Helicobacteraceae; Wollnella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
SCHOELGEROW N.A., Simon J., Klimmek O.;
Schoelder P.V., Simon J., Klimmek O.;
Schoelder P.V., Simon J., Klimmek O.;
Schoelder Canderse of Wolinella succinogenes.";
Lucharted (ADG-2201) to the EMEL/GenBank/DDBJ databases.
EMEL, AJ18/P89; CACGO085.1; -.
RicerPro. IPRO01763; Rhodanese-like.
RicerPro. IPRO01763; Rhodanese, 2.
Richer, SWO0450; RBOD; 3.
Signal; Transferase.
I Lorent Should Sequence of State of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL 1 21 POTENTIAL,
CHAIN 22 389 SULFUR TRANSFERASE.
SEQUENCE 389 AA; 41949 MW; 6C60850CAD9C4B9C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT; 172 AA
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RX MEDIUNE-12155738 pubMed=11356048;
RRA MEDIUNE-12155738 pubMed=11356048;
RRA "Sequence and expression of a cDNA encoding both pituitary adenylate "Sequence activating polypeptide and growth hormone-releasing hormone-ray class activating polypeptide in channel catfish (Ictalurus punctatus).";
Gen. Comp. Endocrinol. 122:354-363(2001).
REDIA RAYSTA243, RAX66970.1;
RIMER: PRO0575; GLUCAGON.
RRANES: RRO0575; GLUCAGON.
SWRAT: SW00070; GLUCAGON.
PRESITE: PS00256; GLUCAGON; 1.
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QUOXZ4

ID QUOXZ4

QUOXZ4

QUOXZ4

QUOXZ4;

COUNTEMBLE-1.19, Created)

DT 01-DEC-2001 (TrEMBLE-1.19, Created)

DT 01-DEC-2001 (TrEMBLE-1.19, Last sequence update)

DT 01-MAR-2003 (TrEMBLE-1.23, Last annotation update)

DE crowth hormone-releasing hormone/pituitary adenylate cyclase activating polypeptide precursor.

OC setimopterygii, Neopterygii, Peleostai, Ostariophysi, Siluriformes, Crealuridae; Ictalurus.

OC actimopterygii, Neopterygii, Peleostai, Ostariophysi, Siluriformes, Crealuridae; Ictalurus.

NEM REDIRE-2125738; Pubmed-11356048;

RA SEQUENCE FROM N.A.

RA SEQUENCE PROM N.A.

RA SEQUENCE ACTIVATING Polypeptide and growth hormone-releasing hormone-releasing profiles; PRO0053; Glucagon.

DR PRINTS: PRO0053; Glucagon.

DR PROSTIE; PRO0050; GLUCARO.

SMART, SMO0070; GLUCARO.

DR PROSTIE; PRO0050; GLUCARO.

ETT SIGNAL

FT SIGNAL

FT CHAIN 84 128 GROWTH ADENTARIE CHAIN-RELEASING HORMONE-RELEASING HORMONE-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
34.5%, Score 53.5; DB 13; Length 175;
Best Local Similarity 40.0%; Pred. No. 5.1;
Matches 12; Conservative 5; Mismatches 11; Indels 1; Gaps
     FT CHAIN 128 165 PITUTTARY ADENYLATE CYCLASE-ACTIVATING PT POLYPEPTIDE.

SQ SEQUENCE 172 AA; 19558 MM; 458117F0042E36DD CRC64;
                                                                                                                                                                                    Query Match

34.8%; Score 54, DB 13; Length 172;

Best Local Similarity 33.3%; Pred. No. 4.2;

Matches 10; Conservative 8; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                        128 165
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Search completed: October 15, 2003, 10:55:48 Job time : 59.0164 secs

1 HAEGTFTSDVSSYLEGGAAKEFIAWLVKGR 30